

AMERICAN ARTISAN and Hardware Record

VOL. 78. No. 11. 620 SOUTH MICHIGAN AVENUE, CHICAGO, SEPTEMBER 13, 1919.

\$2.00 Per Year.



XXth CENTURY WARM AIR HEATERS

DEALERS, who for years have sold **XXth CENTURY WARM AIR HEATERS**, know that the **XXth CENTURY AGENCY** is *A Commercial Asset*. They know that every **XXth CENTURY WARM AIR HEATER** they install will make good and therefore open the way for more sales for them. You, too, can derive these same benefits if you have the **XXth CENTURY AGENCY** in your town. The Series D all-cast warm air heater, shown above, is beyond a doubt the most efficient and economical heater of its size on the market.

Let us give you just one reason why.

You know that the gases contain the major part of the heat units in coal. When the gases are wasted, money is wasted and less heat is obtained from the warm air heater. The **XXth CENTURY WARM AIR HEATERS** burn all the gases.

The Exclusive XXth CENTURY Air Chamber Feature makes this possible.

This feature, in conjunction with the air cells, and slots in the fire-pot, is the most progressive feature in the direction of proper combustion in modern heating.

There are other features which you should know about.

We would be glad to send you full particulars on the **XXth CENTURY WARM AIR HEATERS**. Many dealers have recently taken our agency. Why not you?

Write today for our new catalog and circulars.

**THE XXth CENTURY HEATING & VENTILATING CO.
AKRON, OHIO**

MAHONING HEATERS

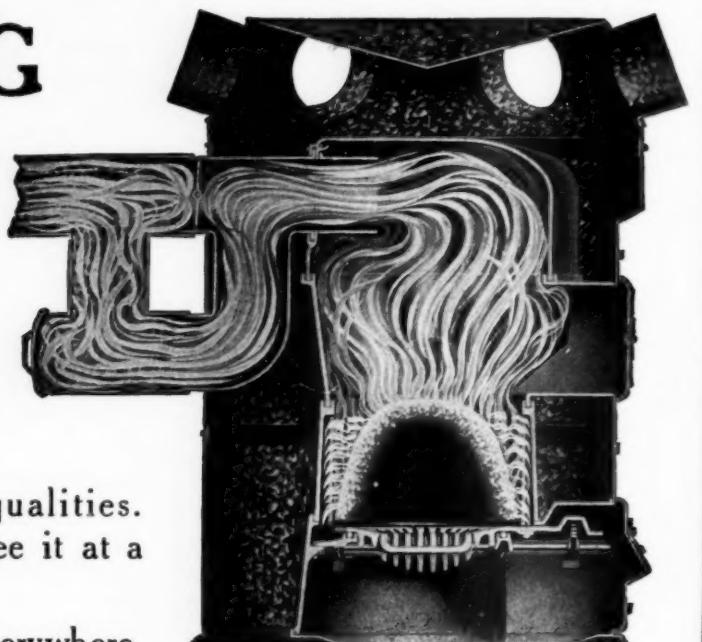
Sell Themselves

So many superior qualities are involved in **MAHONING** construction that to tell of one would slight others equally as important.

No need to *talk* Mahoning qualities. *Show* your customer,—he will see it at a glance.

We want good live dealers everywhere, and offer a tempting proposition.

A style and size for every purpose.



MAHONING TYPE "C"

Illustration shows quite clearly the combustion as it takes place in the Mahoning system. Note how the admission of air through the slots in the firepot causes combustion to take place all around the outside of the fire. The hottest part of the flame is in direct contact with the outside surface of the heater where the radiation of heat takes place. Only one of the features that have made the Mahoning famous from coast to coast.

**The MAHONING FOUNDRY CO.
YOUNGSTOWN, OHIO**

A Mammoth Plant With a Mammoth Production

FRONT RANK

TRADE NAME

REGISTERED

The Steel Furnace that is positively *gas-tight*, because it's *made right*.

Made of tested metal, cold-riveted together. No direct draft to warp and buckle. Stays in order.

If you're not handling the **FRONT RANK** you, your customers and we are all losing money. Write for illustrated literature and prices.

FRONT RANK
TRADE NAME REGISTERED

Steel Furnace

is fool-proof. Gets more heat value out of the fuel used; because its radiating surface is greater, and more of the heat generated in burning the coal is extracted before the smoke and gases are passed on up the flue.



Haynes-Langenberg Mfg. Co.

4058 Forest Park Blvd.

St. Louis, Mo.

TRADE MARK REGISTERED.

ESTABLISHED 1880
Representative of
The Hardware, Stove,
Sheet Metal, and Warm
Air Heating and Ventilating
Interests
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A SOURCE OF profit and service is the vacuum cleaner. Hardware dealers can quicken their sales of this

Sell the Vacuum Cleaner. useful commodity by featuring its advantages in the matter of conserving the health of the family. It has been pointed

out that the advent of the electric vacuum cleaner contributed more toward the preservation of health than any innovation since the passage of the Pure Food and Drug Act, for it has accomplished the primary object of ridding thousands of homes of the various disease germs that find breeding places in rugs and carpets, mattresses and upholstery. The unsanitary condition of countless homes is well known to the medical fraternity and until the vacuum cleaner made its appearance there did not seem to be any satisfactory or efficient means of ridding the house of bacteria and disease-breeding germs.

Manifestly carpets could not be taken up and cleaned daily and rugs could at best be shaken and beaten only on very infrequent occasions. The cleaner, however, will do the work quickly and efficiently every day. The labor incident to removing the dust-breeding germs is reduced to the minimum, and the work of securing sanitary homes, instead of being a matter of considerable labor, has become a duty of genuine pleasure.

The annual death toll as a consequence of disease-breeding germs in the home is appalling, and but little was accomplished in improving sanitary conditions until the vacuum cleaner was invented. In many homes the dust of ages was allowed to accumulate, and it is not strange that the family physician was a constant visitor. With the removal of this dust and its reappearance effectually barred by the use of the vacuum cleaner, an era of better health and greater longevity began at once.

At first physicians and social workers were averse to recommending the use of vacuum cleaners for the reason that any activity in this direction would likely be considered as a campaign effort in behalf of the manufacturers; but since it has become an axiom that "a well kept home is impossible without a vacuum cleaner," sociologists do not hesitate to recommend them.

Not only carpets and rugs can be kept free of insects and disease germs by the vacuum cleaner, but mattresses, davenport and upholstery of all kinds can be maintained in a cleaner condition and free from pests. Moreover, the cleaning of a room by the vacuum process is not attended by the familiar cloud of dust which under former methods saturated every-

thing and merely transferred the germs from the rugs and carpets to the walls and furniture.

Many homes today are run on principles equally as scientific as those which govern the office of a successful manufacturing institution. Everything is in its place and the work is performed with a precision and neatness that is astonishing. Brilliant minds have laid out the details and every utility has a purpose. It would be impossible to keep the home in this ideal condition were it not for the modern vacuum cleaner.

The leading manufacturers of this desirable device are giving the dealers intelligent assistance by establishing service branches throughout the country, each branch having a man in charge of repairs who is thoroughly familiar with their machine. No exorbitant charge is made, for profit is not looked for from this service. The service department is a good-will department. Under the former system a woman brings her machine to the store where it was purchased, if it does not work satisfactorily. This store may not have a repair department, and the dealer must send the machine to the manufacturer. After much loss of time the cleaner is returned, but in the meantime the woman has become impatient and has given the dealer no end of worry and annoyance by her frequent calls. The dealer finally regrets that he has sold the cleaner in the first place. All this trouble will be avoided under the new service system recently inaugurated by one of the foremost makers of vacuum cleaners. All large cities will have a service station and repairs and adjustments will be made promptly, and there will be no forfeiture of customers' friendship by delay.

THE TOPIC UPPERMOST in the world of industry today is the need for increasing the output of mills, shops, and factors and of performing **Stabilizing Industries.** more work everywhere during business hours. This need must be etched deeply into the consciousness of the American people as the sure and logical remedy for the present perplexities of price and wages. It is, therefore, a timely thing to disseminate arguments in behalf of this remedy, to the end that the nation may be aroused to concerted action. The September market letter of the National Bank of Commerce, New York City, rightly declares that prosperity has only one possible basis.

That basis is production. Volume of business in tons and dozens and bales is its true measure.

There is now no fundamental reason to deter production and not until it has increased to its new peace-

time proportions can we rest in the assurance that as far as its effects on our economic life are concerned, the war has passed into history. To this end, every man and woman industrially or commercially employed must produce to capacity. Not only is production essential, but capital must be accumulated at a rate rapid enough to offset the destruction which took place during five years. The consuming public must recognize that it can not continue indefinitely the scale of expenditure which followed as a reaction from the self-denial of war, but that thrift for personal benefit is as essential as thrift for one's country. When every individual capable of gainful employment is producing to capacity and spending conservatively, our economic adjustment will be complete.

It is the conviction of the business world that high, or at least rising prices, are evidences of a satisfactory situation. This conviction has a basis in fact, in this, that rising prices stimulate increased productive and commercial activity. Our high prices are unquestionably the product of a world-wide curtailment as a result of the war, of those goods necessary to a peace-time life; of an increase in the circulating medium and an expansion of credit which the conflict through which the world has just passed rendered inevitable; and of the increased margins of profit deemed necessary to meet the risks involved in a period of rising prices. The era of extravagance which has followed the restrictions of war has also been a factor in raising prices. When the buying public seems not only willing but anxious to purchase, regardless of cost, prices respond as a result of what appears to be a shortage of stocks when measured by demand.

Even though actual hostilities are now ten months behind us, the causes which have resulted in present prices are largely operative and it seems likely that stabilization at a new price level is approaching. In periods of rapidly rising prices, the commercial and financial activity resulting is likely to increase out of proportion to the growth in productive activity on which it must ultimately be based. Although the actual physical adjustment of American production to post-war demands has been more rapid than the most optimistic could have hoped, production has not yet expanded to what must be its normal post-war level.

So SHE WENT into the garden to cut a cabbage-leaf to make an apple-pie; and at the same time a great she-bear, coming up the street, pops its

Be Cordial head into the shop. "What! No soap?"
to Salesmen. So he died, and she very imprudently married the barber; and there were present the Picaninnies, and the Jobbillies, and the Garyulies, and the grand Panjandrum himself, with the little round button at top; and they all fell to playing the game of catch as catch can, till the gunpowder ran out at the heels of their boots.

What's all this about?

It doesn't mean anything, though it was printed in one of Miss Edgeworth's books about a hundred years ago.

But it is as clear as crystal and as plain as the noonday sun in comparison with the logic of the mer-

chant who argues in contravention of the traveling salesman or receives him gruffly and dismisses him without a hearing.

The grand Panjandrum himself, with the little round button at top, has all the wisdom of the Orient and the dialectic skill of Aristotle in his empty pate when pitted against the pinchbeck business man who thinks himself above the commercial traveler who comes to solicit his orders for a line of goods.

It would be difficult to find adjectives vigorous enough to describe the stupidity of a storekeeper who would send his clerk to tell a customer that he is too busy to attend upon him and to say to him curtly, "Come again some other time."

Truly, there is a parity between such a tradesman and the fellow who denies the traveling sales representative the courtesy of an interview, putting him off with vague and indefinite phrases or instructing some underling to get rid of him with a palpable lie about being out of town.

The commercial traveler is the agent of prosperity. He is an underwriter of opportunity. His coming into the store or offices of a business house is as fraught with possibilities of service and profit for the establishment which he visits as the entering of a score of customers. He knows market conditions and trade prospects. He understands the goods which he sells and is able to interpret the policy of the manufacturer or jobber in a spirit which promotes pleasant and profitable relations between maker and distributor.

The traveling sales representative is not a mendicant seeking a dole of charity. He offers full values for what he receives. Morally and justly he has a right to a hearing.

Since business depends upon the public for its income, it can not be considered as a private enterprise, independent and autocratic. The people, through their legislators, make laws to which it must conform. It thrives upon the good will of the folk. Good will is gained and held today only by service, courtesy, and fair dealing—in a word, by the working together of every person essential to the making and marketing of a commodity.

Not for sentimental reasons, but because he is an indispensable factor in the development of trade, the traveling sales representative should be hailed as a colleague and helper.

NOT LONG AGO a storekeeper passed away who represented a type of retailer now almost extinct. Before

the Civil War he owned one of the biggest stores in Illinois, outside of Chicago. During the struggle between the

North and South, he made money; but after peace was declared he failed to keep in step with the march of progress, bought no new goods and in no way moved with the times, so that ten years after the war he had become known as "The man who stood still," and by that name he has gone ever since. During the past years he has been the only person who ever entered his store, except a few visitors who went there to see what it looked like, and although his \$10,000 worth of goods were there on the shelves, they never attracted a customer, for one article of his creed

was "I never advertise." So, although he went to his store daily at 7 o'clock each morning, and stayed there until his usual closing time, 6 p. m., the stock remained as it was when the war passed finally into history. He demonstrated very effectually that one way to turn a live concern into a Curiosity Shop is to try to do without publicity.

RANDOM NOTES AND SKETCHES. By Sidney Arnold.

One of the hardest and most heroic things to do is to keep our sorrows to ourselves and share only our joys with others. Aches and pains are of no interest to anyone but the person who endures them. Some of the world's greatest philosophers have taught us that suffering, silently and bravely borne, is ennobling. We need some of the ancient Spartan spirit today because we have become flaccid and effeminate in many things.

* * *

My friend Colonel William J. Lockwood of Chicago, Illinois, has just returned from a fishing trip to Lost Lake, Wisconsin. He says he caught a 75-pound muskellonge. The Colonel is the sort of a man whom Diogenes would need no lantern to find. Hence, I unreservedly believe in the reported weight and kind of fish which he caught.

* * *

A neighbor of my friend Paul L. Biersach, Secretary Master Sheet Metal Contractors' Association of Wisconsin, Milwaukee, Wisconsin, told him the following experience:

"I am going to the ball game this afternoon," I said to my wife. "I'm anxious to see our new ball player."

"My dear it won't do you a bit of good to go," she answered. "I read that he died yesterday trying to steal third."

* * *

Even the children are beginning to talk motor jargon, declares my friend Gus Engelhardt, the retail hardware dealer of Chicago, Illinois.

"Look, mother," said a little fellow, pointing to a hole in his stocking, "I've had a blowout."

A little girl, being asked how she managed to catch a chicken replied: "I just runned him till his gas gave out an' then I picked him up."

A third youngster, who was usually slow in obeying his mother's call, came quickly enough when she called him to dinner. On her pointing this fact out to him, he said: "Oh, I always change to high when I come to meals."

* * *

My friend Arthur E. Rudolphi, of the Rudy Furnace Company, Dowagiac, Michigan, tells about a proud young father who telegraphed the news of his happiness to his brother in these words: "A handsome boy has come to my house and claims to be your nephew. We are doing our best to give him a proper welcome."

The brother, however, failed to see the point, and replied:

"I have not got a nephew. The young man is an impostor."

* * *

In advertising it is highly important to express one's ideas in words whose meaning can not be twisted, thus avoiding wrong impressions, says my friend, William Wynn, president Scheible-Moncrief Heater Company, Cleveland, Ohio. He illustrates the point with the following story:

The teacher was taking the class in a very interesting course of experiments, but, noticing some of the pupils not paying proper attention, he said:

"Now, you know, I can not attend to you and my experiments at the same time. If anything goes wrong the whole laboratory, and we with it, will be blown into the air. Come a little closer, boys, so that you may follow me better."

* * *

The reason why some workers never advance is because they have no initiative, according to my friend E. B. Langenberg of Haynes-Langenberg Manufacturing Company, St. Louis, Missouri. He elucidates his meaning with this story:

Two laborers who were engaged on the same job were accustomed to meet every morning at the house of one of them and walk to work together. One morning Mike called for Pat and was told by Pat's wife that he had been there a few minutes before, but that she did not know where he had gone.

"I'll look around the place for him," said Mike.

He came back at the end of five minutes.

"I looked through the woodshed and the chicken house," he told Mrs. Pat, "and finally I found him hanging by a rope to a rafter in the barn."

"Did you cut him down?"

"Why, no, he wasn't dead yet," said Mike.

* * *

To many of the younger generation of readers the late Senator Ingalls' poem on "Opportunity" is unknown. For their benefit as well as for the good of others who are not familiar with the verses in question, I reprint them as follows:

Opportunity.

They do me wrong who say I come no more
When once I knock and fail to find you in;
For every day I stand outside your door,
And bid you wake, and rise to fight and win.

Wail not for precious chances passed away,
Weep not for golden ages on the wane!
Each night I burn the records of the day:
At sunrise every soul is born again.

Laugh like a boy at splendors that have sped,
To vanished joys be blind and deaf and dumb;
My judgments seal the dead past with its dead,
But never bind a moment yet to come.

Though deep and mire, wring not your hands and weep;
I lend my arm to all who say "I can!"
No shamefaced outcast ever sank so deep
But yet might rise and be again a man!

Dost thou behold thy lost youth all aghast?
Dost reel from righteous retribution's blow?
Then turn from blotted archives of the past
And find the future's pages white as snow.

Art thou a mourner? Rouse thee from thy spell;
Art thou a sinner? Sins may be forgiven;
Each morning gives thee wings to flee from hell,
Each night a star to guide thy feet to heaven!

UP TO THE MINUTE NEWS SIFTINGS

STOVE MANUFACTURERS CONVENE.

In the present circumstances of the trade it would be a waste of good lung tissue to invite stove manufacturers to take part in any of the ordinary diversions in which some business men find time to indulge during working hours. Verdigris and rust are fast gathering upon the driving ends of their golf sticks. They are too busy making and marketing stoves to have time for anything else. Only because it was essential to their interests, therefore, did the members of the Western Central Stove Manufacturers' Association come together Wednesday, September 10, 1919, for a meeting in the Congress Hotel, Chicago, Illinois. The president of the Association, J. T. Templeton, directed the meeting to the general satisfaction with the able assistance of Allen W. Williams, secretary of the Association. Discussion of the subject of the high cost of labor and materials disclosed the fact that all the members are affected by these adverse factors in practically the same degree. Demand for stoves is brisk throughout the Association's territory and standards of quality are not only well maintained but, in many instances, raised to higher levels.

INTERNATIONAL TRADE CONFERENCE ISSUES CALL FOR MEETING.

From the headquarters of the Chamber of Commerce of the United States, invitations have been issued to 20,000 business men throughout the country to attend the International Trade Conference, September 30 to October 3, 1919, in Atlantic City, New Jersey. The meeting will be attended by delegates from England, France, Italy and Belgium and is expected by its sponsors to be the most important assemblage of its kind ever brought together. It is the purpose to center attention on various phases of commerce in an effort to stimulate production and encourage international trade.

While the program has not been completed, the committee in charge of this feature, under the chairmanship of John H. Fahey, of Boston, has laid down the general lines on which the conference will be held. The proceedings will be divided and time allotted in accordance with the importance of the various subjects to be brought up, numbering about 20 in all.

Relative to the discussion of a subject, fuel supply, for instance, there will be an American committee, including producers, shippers, economists and business men who will meet from day to day with the foreign delegates. By this method Italy, for example, will have every opportunity to present its needs in conference with the committee on fuel supply, which from day to day will meet with the representatives of

other countries. The composition of the committees appointed to deal with each of the main subjects to come up will be such as to insure that the best authorities in the United States will be at the disposition of foreign delegates.

Following an examination in detail of such questions, the conclusions reached will be reported to the conference as a whole. In this way the representatives of each country will have an exceptional opportunity to present their views, and the information they bring with them, in the most effective way, making it possible for the open sessions to be devoted to discussions and addresses of a general character.

There will be from five to seven delegates from England, France, Italy and Belgium, and in addition a force of secretaries, making a party of 50. It is expected that not fewer than 3,000 American business men will meet them at Atlantic City.

After the conference the foreign delegates will make a short tour, visiting leading industrial centers, as guests of the Chamber of Commerce of the United States.

DON'T ONLY MOVE YOUR LEGS.

"Smile! Don't only move your legs! Smile!" shouted the bad man of the West as he was teaching a tenderfoot to dance. And, roughly speaking, this is good advice for any task. Whatever you do, smile as you do it. The results will be greater and you will find the work much easier than you expected yourself.

ISSUES NEW STOVE CATALOGUE.

Henry N. Clark and Company, 56-58-60-62 Union Street, Boston, Massachusetts, have recently gotten out the Eighth Edition of their general catalogue of stove, range and heater repairs, stove dealers' supplies, warm air heater pipe and fittings, stoves, stove pipe and elbows, etc. This catalogue is 9x12 inches and has 152 pages. It is profusely illustrated and is a welcome addition to the store of any retailer. Copies may be secured by addressing Henry N. Clark and Company, 56-62 Union Street, Boston, Massachusetts.

TELLS CAUSES OF HIGH PRICES.

Before trying to remedy high prices it is essential that those charged with the duty come clearly to recognize the causes. The high cost of living has not been due to conditions peculiar to any one industry. There have been three general causes, affecting all industries—the unprecedented export of goods to Europe, the decrease in production and the expansion of the currency.

SUPPLIES EDUCATIONAL FILMS TO PROMOTE BETTER WORKMANSHIP.

The Bureau of Commercial Economics, 1600 Broadway, New York City, an altruistic organization exhibiting educational films all over the world, has started a nation-wide campaign to get free motion picture theaters into factories, department stores, mining towns, country crossroad centers, lumber camps—every place where there are workers.

The bureau has the largest educational motion picture library in the world—21,000,000 feet of film on almost every conceivable subject, such as, government, economics, industry, history, travel, nature, science, health, commerce, agriculture. All these pictures will be loaned without charge to those who will exhibit them free to audiences.

In order that thousands instead of hundreds of business men and organizations will become borrower of these films, the bureau is sending out questionnaires, the answering of which will enable the bureau's engineer to advise as to the equipment most suitable in the circumstances, how best to adapt the workshop, church, hall, or factory lunchroom for motion picture exhibitions, and any other questions the individual case requires.

In addition the bureau is sending eight traveling motion picture theaters—specially built auto trucks—all over the country to arouse persons and organizations, particularly employers as to the possibilities of educational pictures. These trucks carry a projection machine, an electricity generating plant and portable screen. Thus they are able to show pictures at an isolated western ranch center as well as in a city.

If the masses of Russia had been as educated as the American people, Bolshevism never would have raised its venomous head. Dr. Francis Holley, director of the bureau, knows there are thousands of workmen in this country who really believe that the shortest cut to a fatter pay envelope is through the destruction of the present employers. The professional agitators have told them so, and nobody in particular has ever told them differently. Well, the 21,000,000 feet of educational film are ready.

The bureau has films taken in Russia under the Bolsheviks. These and pictures of life in America form an elegant contrast. Sitting in the silence of an improvised theater in a work shop, the employees can take their pick—the American plan or the Soviet plan.

One big reason for the social unrest is the narrowness of lives of many of the workers. Educational pictures will enable them to step out of the rut of a life bounded by factory, home and corner coffee club, and begin to live in the wide world.

Dr. Holley believes an employee's interest in his work would be increased if he could see motion pictures showing how the men on the other end of the job work getting the raw product to the factory door, and other pictures showing the ultimate uses of the finished product.

Industrial films, notably a great many produced under the supervision of Harry Lavey, manager of Universal's Industrial Department, are used to show

one part of the country how the other half works—and lives. Miss A. Maris Boggs, dean and co-founder of the bureau, who passes on all films accepted into the bureau's library, is eager for more of these industrial pictures, and wishes manufacturers, who have had films made of their own plants, would submit them.

Dr. Holley believes employers would find it a good plan to let employes feel that the picture show belongs to them. The employer could offer to provide space and equipment if employes would run the show—select programs from the bureau's catalogue, attend to the details of ordering the pictures, etc. Thus a point of cooperation would be established between employer and employes which would be worth many times the cost of providing the "theater."

The bureau, making no profits on its films, is supported by endowment, annuity and voluntary subscription. The United States government and principal foreign governments are cooperating with it. It is endorsed by churches and leading business men of the world.

Its films are now teaching mothers of India how to stop their babies from dying. The bureau's films go by dog sled to the tuberculosis-stricken Esquimo, by camels to the dwellers of African deserts and by lamas over the Andes to the Inca Indians.

HAVE CONFIDENCE IN YOURSELF.

If you have a problem today of putting over a business proposition, take a tip from old Euripides who lived 500 years before the beginning of the present era: "Cowards do not count in battle; they are there, but not in it." The fellow who is afraid he is not big enough to tackle the president of the largest corporation, who does not quite believe in himself, may be in the selling profession, but counts little. Never doubt yourself or your ability. Supreme confidence—not conceit—must be one of the ingredients of a successful salesman.

FILLS RUSH ORDERS PROMPTLY.

The Bement Stove Repair Company of 130 East Ottawa Street, Lansing, Michigan, carries a complete line of repairs for stoves and warm air heaters of all makes. This Company has a reputation for quick service and is capable at all times of filling the dealer's "rush order" promptly. Such a feature is commendable and dealers would do well to write to the Bement Stove Repair Company, 130 East Ottawa Street, Lansing, Michigan, for further particulars about its line.

THREE THINGS LEAD TO HAPPINESS.

Keep three things: your health, happiness and a bank account. If you keep your health you will be happy and you don't need to worry so much about your bank account. If you keep happy you will probably be healthy and your bank account will be sufficient. If you keep a bank account you will have no cause to worry about your health.

THE WEEK'S HARDWARE RECORD

Of Interest to Manufacturer, Jobber and Retailer

AMERICAN ARTISAN AND HARDWARE RECORD
is the only publication containing western hardware and metal prices corrected weekly.
You will find these on pages 44 to 49 inclusive.

The Central Hardware and Stove Company, Akron, Ohio, has increased its capital stock from \$250,000 to \$500,000.

The National Spring and Wire Company, Grand Rapids, Michigan, is planning a plant, four stories, 86x500 feet.

The Page Steel and Wire Company of New York City has recently opened branch offices at 29 South LaSalle Street, Chicago, and in the Book Building, Detroit.

William F. Lemmon and Brother, Trenton, New Jersey, has been incorporated with a capital of \$50,000 to manufacture hardware, by W. D. Lemmon, Edgar H. Freeman and others.

The Degareiner Hardware Company, Hortonville, Wisconsin, is having plans prepared for a one story shop building, 60x120 feet, to be used as a machine shop and sheet metal works.

The Spunn-Marchman Hardware Company, Dothan, Alabama, has been incorporated for \$50,000. The incorporators are P. N. Spunn, M. S. Spunn, H. F. Spunn and A. T. Marchman.

The Honeyman Hardware Company, Portland, Oregon, is having plans prepared for a one story, 100x100 foot, and two story, 100x100 foot additions. The estimated cost is about \$50,000 each.

The Matewan Hardware and Furniture Company, Matewan, West Virginia, has been incorporated for \$25,000 by M. T. Persinger, George W. Coffey, E. L. Reams, W. E. Kiser and D. H. Hope.

J. S. Lawson and Company, 416 West 33rd Street, New York City, has been incorporated for \$10,000 to make machinery and hardware. The incorporators are J. S. Lawson, J. A. Potter and A. D. Stanton.

A permit has been issued to the Frankfurth Hardware Company of Milwaukee, Wisconsin, for the erection of a seven story warehouse at 119 West Water Street, to cost approximately \$85,000. The building is to be of brick and reinforced concrete, 50x150 feet.

HARDWARE EXCHANGE WILL OPEN IN NEW YORK CITY NEXT MONTH.

Announcement is made by the Merchants' and Manufacturers' Exchange of New York, which will operate the International Hardware and Housefurnishing Exchange in Grand Central Palace as one of the eight permanent industrial expositions on the eight upper floors of that building, that Paul Revere

has been made manager of the Hardware and House-furnishing Exchange and G. C. Brown of the House-furnishing exhibit of that exchange. Fred W. Payne, general manager of the expositions to be staged in the Palace, reports that the outlook for all of these expositions is most satisfactory and that most of them will be ready to open on October 15th.

This Hardware Exposition is to be one of the most advanced steps made in the industry since the War ended, and will be a permanent affair. It will occupy 50,000 square feet of floor space, in the high structure, which is the largest exposition building in the world, and will include a comprehensive display by manufacturers and selling agencies of hardware, stoves, shelving, tools, small machines, bicycles, gas and steam fixtures and fittings, electric fixtures; house-furnishings, such as aluminum ware, tin and enamel ware, washing machines, china and glassware, gas, oil and electric heaters, refrigerators, etc.

The new enterprise enjoys phenomenal backing. The Nemours Trading Corporation, of which Alfred I. du Pont is president, owns and controls the Merchants' and Manufacturers' Exchange of New York. It has branches in all of the leading cities of the world, consisting of 19 branch offices and 3,000 foreign selling agencies.

The Hardware Exchange and the others in the Palace will fill an urgent want in their respective fields. The development of both foreign and domestic trade to which the venture looks forward unquestionably will be remarkable during the next few years, and in this development the Merchants' and Manufacturers' Exchange in general, and the Hardware Exchange in particular, will be big factors.

Already the fame of the enterprise is spreading throughout the world and newspapers and trade papers in many foreign countries have commented upon it most favorably. It is practically assured that the Grand Central Palace is destined to become a mecca for buyers both domestic and foreign.

Visitors at the Hardware Exchange will also find the other expositions in this building of considerable interest. Included among them are the International Factory Appliance Exposition, International Machinery Exposition, International Farm Tractor and Implement Exchange, International Exposition of Mining Industries, International Exposition of Municipal Equipment, etc. The advantages of this great world trade clearing house are obvious. Manufacturers will have their exhibits side by side, affording easy comparison. Interchange of ideas and the opportunity to observe what is new and improved in machinery, will be of decided benefit to all who are connected with the industry. Then, too, familiarity with the implements and machinery of one industry so often leads to appreciation of their applicability to another.

REQUESTS SUGGESTION AS TO BRITISH COMPETITION IN METAL GOODS.

Many phases of the commerce in metal goods need thoroughly to be understood in any study of the prevailing circumstances in which these commodities enter into export trade. Consequently there are reason and timeliness in the subjoined letter sent out to the members of the American Hardware Manufacturers' Association by F. D. Mitchell, its secretary-treasurer:

"In a conference with Dr. Page, Acting Chairman of the Tariff Commission, President Asbury learns that the Tariff Commission is about to send special investigators to Great Britain to make inquiry into the conditions which surround the manufacture of metals and finished goods made of metal.

"The information thus obtained will be used in preparing material for presentation to Congress if and when Congress asks the Commission for data which will guide them in the preparation of Tariff schedules.

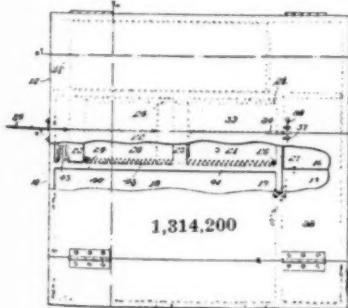
"The Tariff Commission would welcome any suggestions as to the line of inquiry relating to specific items which should be made by their investigators on the proposed trip.

"The exchange rate on the English pound having declined, places British manufacturers in a more favorable position than normally. Therefore, it is possible that some of our members may presently be confronted with competition which may be troublesome.

"Members are earnestly requested to mail us all possible information bearing upon the major points of any experience which they may have had with British competition, and also any suggestions they may have to offer as to the principal lines of inquiry which it would be profitable for the Commission to make."

MOUSETRAP IS PATENTED.

Nick B. Miller, Fairford, Manitoba, Canada, has secured United States patent rights, under number 1,314,200 for a mousetrap described herewith:

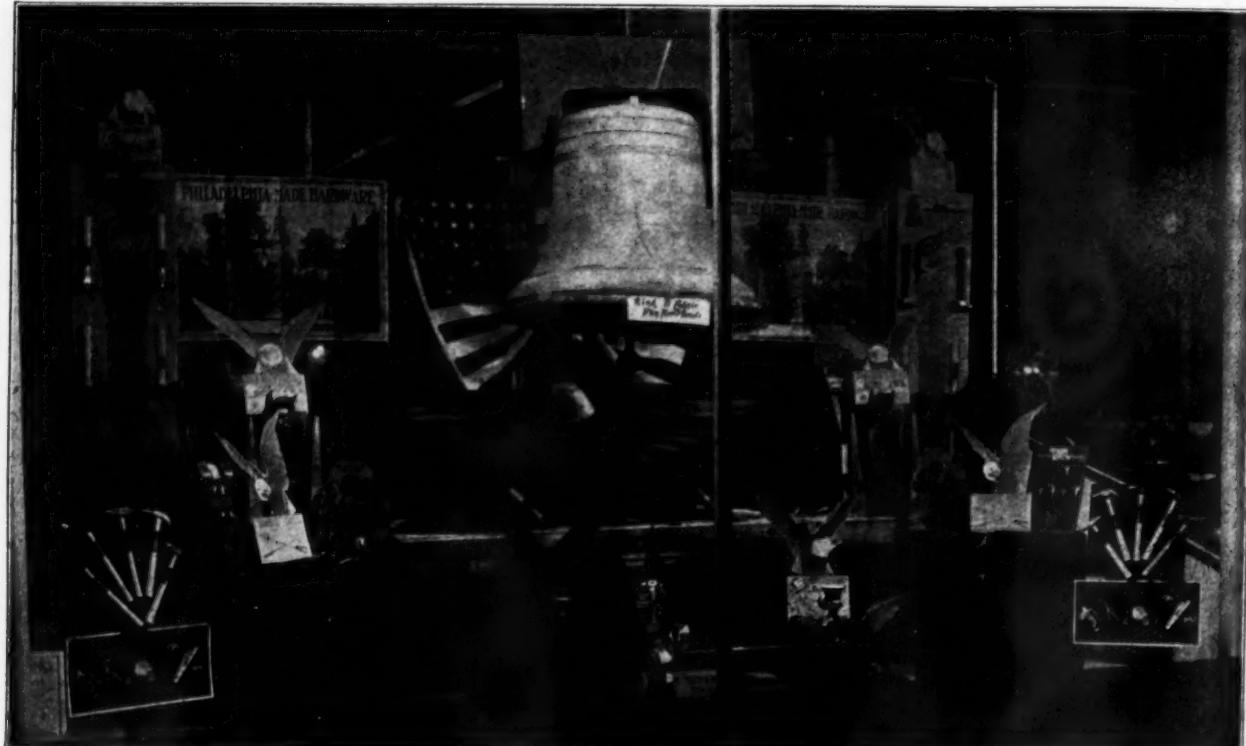


PRINCIPLES AND EXAMPLES OF GOOD WINDOW DISPLAYS.

WINDOW DISPLAY OF TRADEMARKED TOOLS KEEPS SALESMEN BUSY.

Times are good. Everywhere money is spent. People are buying goods of better quality. They no longer count the pennies in a dollar when they want articles from a hardware store. A mechanic who formerly contented himself with a cheaper grade of tools now refuses to be satisfied with anything short of the best. Indeed, in numerous instances, skilled workers are

output during working hours, rather than to participate in any agitation looking toward curtailment of buying. Indeed, he should take full advantage of the present tendency in favor of trademarked commodities of better quality by featuring them in his window displays and making every legitimate effort to increase their sale among his customers. One of the effective methods of accomplishing this desirable result is well exemplified in the window display of Philadelphia-made hardware shown in the accompanying illustra-



Window Display of Philadelphia-Made Hardware, Arranged by A. Deutz and Brother, Laredo, Texas.

purchasing extra equipment for their trade as a matter of convenience and precaution against possible breakage and loss. Sociologists and others theoretically concerned in the pressing problem of the high cost of living are inclined to criticize the liberal buying which manifests itself among the folk. They call it extravagance. They denounce it as one of the causes of high prices. They declare that retrenchment in this direction is essential to any measures taken for stabilizing prices and reducing the inflation of the currency. No doubt, there is some substance of truth upon which to base these arguments. But there is another side to the question which is being overlooked in the frantic attempts made to bring down the skyrocketing of prices. That side is the side of the retailer. Not diminished buying but increased production is the pressing necessity of the day. It is to the interest of the retailer to force every movement that has for its purpose the educating of the vast mass of workers to a realization of the importance of more

tion and arranged by A. Deutz and Brother, Laredo, Texas. It will be noticed in an inspection of this exhibit that strong emphasis is placed upon the general trade-mark used in conjunction with the group of commodities which are listed under the collective title of "Philadelphia-Made Hardware." Among others, these comprise articles manufactured by Henry Dissston and Sons Company, Enterprise Manufacturing Company of Pennsylvania, and North Brothers Manufacturing Company. This window display was so successful in drawing customers to the store that it kept the salesmen busy and the cash register ringing with a regularity which was very gratifying to the owners of the store.

The Memphis Queensware Company of Memphis, Tennessee, has been sold out to the Stratton-Warren Hardware Company of Memphis. The new owners will take possession at once and the firm will be known as the Memphis Queensware Company.

Discuss Timely Topics in Meeting of American Washing Machine Manufacturers.

A splendid example of men working together for the betterment of a particular industry was given in the fall meeting of the American Washing Machine Manufacturers' Association which convened Wednesday and Thursday, September 10 and 11, 1919, in the Hotel Sherman, Chicago, Illinois. The members of this progressive organization are thoroughly imbued with the conviction that the general development of trade is the consequence of collective action rather than of dissociated individual effort. They recognize that the interests which they hold in common impera-

Of more than common significance to the hardware dealer who handles washing machines is the address of W. B. Paul, president of the Federal Finance Company, Indianapolis, Indiana, who spoke upon the highly important topic of financing long time payments. It urged the advisability of securing more substantial sums for the first installment from the customer and larger subsequent payments. His address is as follows:

Address on Time Sales, Delivered by W. B. Paul, President Federal Finance Company, Indianapolis, Indiana, to the Meeting of the American Washing Machine Manufacturers' Association, September 10, 1919, in Hotel Sherman, Chicago, Illinois.

The selling of merchandise on the time payment plan has grown very rapidly in recent years and the articles now sold on this plan are too numerous to mention. I want to discuss the question and methods of time sales as applied to washing machines. During the past 60 days I have visited practically every city of any importance East of Chicago and in each place have called upon washing machine dealers, some who knew the business, others who did not.

In my opinion there are too many machines being delivered to proposed buyers on trial which are retained by the proposed prospect as long as the dealer will stand for it and then returned. This same prospect then repeats this process with the dealer of some other make of machine and I personally know of one instance where a family in Indianapolis have been doing their washing for ten months with machines set in on trial.

Condemns Evils of Sending Machines Out on Trial.

I do not believe it good business to let the prospect use the dealer's money for three or four weeks in this manner. After one demonstration the prospective purchaser knows as much as she will ever know about the machine demonstrated. This delivering on trial creates quite an overhead expense for the dealer and one which I believe can be materially reduced. And if the dealers would all agree on one demonstration it would, without question, be a great benefit to the industry.

Much Money Is Tied Up in Machines Out on Trial.

There are thousands of dollars at this minute tied up in machines that have been out on trial for an unreasonable length of time. In some instances the money of the dealer is tied up in these machines; in others the money of the manufacturer. Among the washing machine dealers one finds some that are business men, others that are salesmen, others that deliver goods on the "Take me home and try me" plan. The last named are not usually a success and, as I view it, can not succeed for the reason that their overhead on this plan is too great. The washing machine is not a luxury. It is a necessity, one that pays its own way, a



Raymond Marsh, Secretary
American Washing Machine Manufacturers' Association.

tively require close cooperation and free exchange of ideas and experience. Admittedly, the ordinary problems of production and distribution have been rendered more perplexing and difficult by the widespread unrest in the ranks of labor and the inflation of prices connected with the high cost of living. The question of credits, therefore, presents itself under new aspects and requires changes in the methods of its handling. This and many other topics are best treated in assemblies, wherein methods and policies can be decided upon for the advantage of all concerned.

The meeting of the American Washing Machine Manufacturers' Association proved of immense benefit to the members because it helped to clarify ideas. Some notion of the subjects which occupied the attention of the gathering may be derived from the fact that they included the report on the Morris plan; Co-operation with home demonstration agents; Laundry propaganda; Women in Industry; Publicity; Canvassers' percentages; Unfair competition; Delinquent dealers; Motion picture advertising, etc.

labor saver and money saver. Then, why shouldn't the buyer be compelled to pay at least the money saved by the use of the machine?

I know of dealers now selling on terms of \$5.00 down and \$5.00 per month. How can a dealer pay his bills selling on such terms as this? He thinks he is making money. He believes he is a salesman. He might be called a salesman if he were selling a worthless article on which he was making 150 per cent profit, but such is not the case. He is selling, with the exception of the kitchen stove, the most useful article in the household. In my opinion \$10.00 down and \$10.00 per month is low enough.

Insists on a Substantial First Payment.

On the other hand, you will find the most successful dealers in a financial way selling their merchandise, not loaning it. The secret of installment selling is the collection of a substantial down payment. On investigation I have found that at least ninety per cent of the repossessions were made when a small down payment was collected. Repossessions can not but do harm to all concerned. The person from whom the machine is taken is a perpetual knocker against the particular machine repossessed and the dealer involved—this in addition to the money loss involved in the transaction. Dealers should collect a substantial down payment and unless they do their sale is poorly made and the termination of the transaction uncertain.

Collections are better when a substantial down payment is secured, and I believe the time payment business all depends on this one proposition. It is immaterial how many machines the dealer sells if he can not collect for them and the Federal Finance Company has devoted a great deal of time in making collectors of dealers, and, I might add, have been very successful in so doing. Our idea is not to drive the dealer but instruct and assist him along lines we have found to be effective and absolutely necessary to a successful business. In my opinion the sale of washing machines will become as demoralized as the piano business if this unnatural desire on the part of some dealers to deliver machines continues. I believe most of these evils can be remedied by this association.

Financing the Dealer.

The welfare of the dealer is the first and foremost question concerning the manufacturer and the finance company and any arrangement made that is not beneficial to the dealer is a bad proposition for all parties concerned. In financing the dealer, as I view it, the question is not merely one of how much cash advance and how much discount the banker will give, the proposition goes a great deal farther than that and the relationship between the finance company and dealer must go farther than that, in this, that the company through its advice and cooperation will assist in the building up of the business of the dealer. Any set proposition as to financing will not be successful as different conditions will be met in handling different dealers.

This applies to your business of selling washing machines, you do not handle every dealer the same. The dealer that handles 10 machines can not be dealt with the same as the car load dealer, nor can you deal

with the car load dealer the same as with one handling 10 cars. Our business is alike in so far as the large and small dealers are concerned. You give extra compensation for volume. The Federal Finance Company give extra inducements for volume. We are selling money the same as you are selling washing machines.

It is the business of the manufacturers to keep in close touch with the dealer and it is doubly necessary that the financing company should be in still closer touch with him, and through the combined efforts of the manufacturer and the finance company the dealer can be greatly benefited. Any proposition concerning the financing of the dealer must be elastic in principle and operation—one that is not, will ruin the dealer eventually.

For illustration: Suppose in contracting with a dealer that he obligates himself to the finance company for monthly payments in excess of what he will collect. In that event it is only a question of time until he will become embarrassed.

Margin of Reserve Is Essential.

This is exactly what will eventually happen when full cash advance payment is made to the dealer. A dealer sells the finance company \$1,000 of paper for which he receives \$920, this \$1,000 to be paid weekly or monthly in collections received from that paper. This sort of paper taken on either 10 or 12 months plan will not pay out in less than 12 and 14 months. The dealer has no other source from which to pay, only his collections and on this plan it is necessary that the finance company have their money on the spot as on this basis the turnover of the money is all that keeps them going. The wise dealer today—practically all of them—will tell you that they prefer a margin of reserve for safety and this reserve has saved many dealers sleepless nights. In the first instance, the dealer is receiving more for time payments than any of the finance companies charge, the discount costs the dealer nothing and he can not afford to pass up the collection of his own accounts if he could get them collected for nothing. Any plan of financing which loses the dealer his identity with his customer is bad for the dealer.

A Good Way to Safeguard Credits.

Reserves are always good in all classes of business and this applies to the washing machine manufacturer and jobber. For instance, the dealer owes the manufacturer or jobber for a car load of machines, and I have run across instances of this kind, the fact that the dealer has a reserve with the finance company is certainly a good thing for the manufacturer. Pursuing this idea farther, suppose the reserve were assigned to the manufacturer or jobber to be paid by the finance company to them. Would this help any? We think it would.

The fact is that the Federal Finance Company now have contracts with numerous manufacturers and jobbers where we are taking the paper direct from the dealer and the dealer never sees any of the cash only from the manufacturer or jobber and the peculiar part of this transaction is that the dealer likes it. The Federal Finance Company have paid thousands of dollars in reserves belonging to dealers to the manufacturer and jobbers and were I a manufacturer I certainly

would demand of any dealer I was extending long credit and where the element of chance entered that this reserve be assigned to me.

Our relationship with the dealer is such that we know at all times which way he is going—this is valuable to the manufacturer or jobber. We instruct the dealer in the method of keeping his books, we assist him in collecting by advising him what our long experience has taught us to be correct methods, our relationship with the dealer does not end with dollars and cents. We coöperate with the dealer and assist him in every manner possible. Consequently we have secured the good will of every dealer with whom we have ever had dealings. And we can refer you to dealer after dealer that would pay us for our assistance regardless of the financial benefit derived.

**Trade Acceptances Are Not Easily Adaptable to
Installment Business.**

So-called trade acceptances are good for the finance company. The Federal Finance Company would use that plan if we thought the dealer would or could survive it, but our experience in the collection of this installment paper has taught us that the dealer can not count on 100 per cent collections where there is any volume involved and where he has given his acceptances for 100 per cent in my opinion he is creating trouble which is unavoidable and liable to become disastrous. The only true plan for financing time sales is one that is self-liquidating. In recommending a financial plan to the dealer, considerations other than the mere money transactions are involved. Once we have contracted with a dealer it is not necessary each time he needs money to make new arrangements. We take his paper as long as he treats us fair.

We are now carrying as much as fifty thousand dollars of paper for concerns worth from \$10,000 to \$12,000 each, and we are taking paper from numerous dealers worth less than two thousand dollars. Ordinarily this class of dealers could not sell their paper. That is the reason different plans apply to different dealers. We have dealers we started in business, they had practically nothing; with our money and assistance they have made a success practically without exception. It is not necessary that a dealer live in any particular town or city to take advantage of our plan.

In a general discussion which followed the address of W. B. Paul, the consensus of the meeting was in favor of larger initial payments and shorter periods for the maturity of time paper on washing machines.

The following resolution was passed concerning conditions under which dealers should sell machines on deferred payment plan:

"That it is the recommendation of members of the American Washing Machine Manufacturers Association that sales consummated on the deferred payment plan be on the basis of an initial payment of not less than 10 per cent of the retail cash price before delivery of machine or in any event not later than at time practical demonstration is made, with succeeding payments on basis of transactions being completed within a maximum of 12 months subsequent to delivery of machine."

A subject of perennial interest to associations of business men was ably treated by Roy B. Woolley of

the Society for Electrical Development who spoke on cooperation. The salient paragraphs of his address are herewith reproduced:

**Address on Cooperation by Roy B. Woolley of Society
for Electrical Development Delivered at the Meeting
of the American Washing Machine Manufacturers'
Association, Hotel Sherman, Chicago,
Illinois, September 11, 1919.**

"It will be admitted that this is a day and age of cooperation. The manufacturers of washing machines have seen fit to form an association for cooperation just as have the manufacturers in almost every other line of endeavor, and not alone the manufacturers, but the other important members in the chain of distribution that reaches from supply to demand.

"Some associations are seldom heard of outside their own immediate family circle, while others have engaged in the most elaborate and expensive publicity campaigns to tell the world the 'what, where, when, why and how' of their existence. We all know of the Southern Pine Association, the Barre Granite Association, the Prune Growers, the California Fruit Growers' Association and, in our own electrical field, the Associated Manufacturers of Electrical Appliances, the Electrical Supply Jobbers' Association, the National Association of Electrical Contractors and Dealers, and the Society for Electrical Development.

"Different organizations have different ways and methods of making themselves known—or unknown, as the case may be. I may say that it is far easier for an association to remain obscure than for it to win favorable publicity and become known the country over. And, in my estimation, it is far better for an association, or group of men, no matter what their line of endeavor, to cultivate public friendliness and consideration—to court it in fact—than to shun the light of publicity and public understanding.

I do not mean by 'courting favorable public comment' that you should take pages in the press to advertise yourself. You may have the best of reasons for not doing so. It might be the worst kind of folly.

"Each organization such as your own has something to sell—even if it is only an 'idea.' As I see it, the function of most trade associations is to create the *want*, the *need* for the products produced by the individual members and in no way favor one or a *group* of members. As Mr. Wakeman of the Society has so often said in public: 'In the electrical industry the Society for Electrical Development is concerned only with the making of the loaf' (the loaf meaning the production and distribution of electrical energy) and not with the dividing or cutting up of that loaf.

"So with your association. Cooperatively, you want to see thousands of women who do *not* know the 'idea of making electrically' learn all about it; you would like to see every woman, and every man, too, for that matter, impregnated with the idea that she or he must have their washing done *in the home* in an electric washing machine. After that your interest ceases, so far as the actual make of washing equipment sold to these people.

Reaching the Trade.

"It is vital that more educational work be done on the trade. It must be admitted that the electrical dealer, at least on the average, is not 'sold' himself on

electric washing machines. If he *was* he would have one *in his own house*. And if you will take the trouble to inquire, you will find a surprising majority of men in the industry who have never tried an electric washer, who can not demonstrate it, let alone properly 'talk' it to the prospect. I may say that the society has made a careful study of electric retailing, and we have tried to analyze the shortcomings of the average dealer and central station man.

Washing Machine Handbook.

"I believe that you should at once prepare a complete handbook of electric washing machines along the lines of the one built by the society for certain electric range interests. This book would tell the whole story of design, construction, installation, operation, advertising and sale of washing machines. It should be essentially a neutral book, profusely illustrated but not featuring any one maker's type. Now I am going to say something that may call for some argument, but I feel that this is the place to say it. I have known in your association of differences between certain members who make one distinct type and members who make another type. I do not believe that this is good cooperation. And in this book you could not afford to overlook any various types of models of machines, so long as some dealer may be called upon to sell them some day. Such a book could be prepared at a cost of approximately \$3,000 to \$4,000, but I would recommend that the society do it, and that it be kept uniform with the Electric Range Handbook, as we are attempting to standardize these vitally essential 'How To' books.

"A series of pamphlets or bulletins might be prepared, provided you have the society go on with this work, giving all various selling plans and results in various sections of the country. This would be material in addition to the Handbook. They could give newspaper material for local papers, and the society, were we able to look after this, might possibly combine the work with our Monthly Sales Service, extending its circulation to every dealer on each manufacturer's list.

Publicity in Magazines, Etc.

"Lastly, I urge you gentlemen to get the 'idea of washing electrically' over to the great American public. There are innumerable ways to do this. The society is prepared to help you to the very fullest extent. Our staff is at your disposal, and I bring the assurance of our directors, and general manager, Mr. Wakeman, that we are going to continue to be with you. The limit of our results will depend upon the degree to which we are able to work together."

The possibility of increasing the sales of washing machines through the medium of furniture and general housefurnishing stores was discussed by Edward B. Ford of Grand Rapids, Michigan, who spoke in part as follows:

Address Delivered Before the Meeting of American Washing Machine Manufacturers' Association by Edward R. Ford of the Grand Rapids Furniture Record on Thursday, September 11, 1919.

"Furniture merchants are not yet in the position of the druggists who, it is said, will handle anything they can sell at a profit but they are certainly open to con-

viction regarding new lines of merchandise. The high cost of doing business coupled with the fact that furniture has been scarce and sometimes hard to get has made the furniture dealer receptive to suggestions regarding lines that he can logically add to his stock.

"As suggested, the furniture store as a rule is a big establishment, with plenty of floor space and large roomy windows. The character of the business demands good display facilities. Hence, when the furniture man takes on a new line, he is in an excellent position to push it, to give it the strongest kind of backing, and to put it over if it has merit.

"The question which you have to consider is whether or not you ought to begin to cultivate now this manifest tendency of furniture dealers to make their establishments general housefurnishing stores. There are fundamental things to reckon with in this consideration. You know that at any given moment there is a sum of money in the hands of consumers a portion of which will go for household utilities. The dollar which goes into a sweeper, for example, can not go, at the same time, into a talking machine any more than the dollar which goes into an upholstered chair can go into a washing machine. What you want to accomplish is to get the greatest possible amount of housefurnishing money converted into the product you manufacture. You can't do it by saying 'Oh well, what difference does it make whether we sell a machine through a hardware man or through a furniture man.' It isn't a question of who sells it, it is a question of volume. In order to deliver volume you must have additional channels. You know how the great talking machine industry has secured channels in all manner of stores—drug stores, dry goods stores, jewelry stores, etc. The principle involved is one of frequent suggestion.

"The sum of the matter is this: It would be a decided advantage to washing machine manufacturers if every homekeeper in the land could be made to regard a washing machine as an item of furniture in exactly the same way as she looks upon a table as an item of furniture. Putting washing machines in furniture stores is the most logical way I can think of to accomplish this purpose. As long as there are concerns like Young & Chaffee in Grand Rapids who showed an animated window display of washing machines contrasting a woman over a tub with a neat damsel operating a washing machine, as long as there are furniture stores like the New England Company, to which I have referred, as long as there are housefurnishing establishments like Greens in Hamilton, Ontario, which has successfully exploited a number of household specialties, and, as long as there are furniture dealers like one in Oklahoma who sells sewing machine by adding a house to house canvass to his activities and another in Iowa who sells washing machine the same way—as long as such fellows lead the way and the store papers hand the stories of their success along to other fellows—you have a right to look hopefully to the furniture store. Of course, it's a job, and a big job, to put this idea across, but if I didn't think it worth while I wouldn't suggest it. I don't believe that dealers who have learned to demonstrate bed davenport, adjustable

piano benches, automatic stoves, and kitchen cabinets are going to be found impossible if you show, by your cultivation of them that you do not regard them so. The next edition of the Furniture Manufacturers of the United States will carry a complete list of washing machine manufacturers under the proper classification."

New members admitted to the American Washing Machine Manufacturers' Association at this meeting are: General Railway Signal Company, Rochester, New York; Rochester Washing Machine Corporation, Rochester, New York; Albaugh-Dover Company, Chicago, Illinois; and Surf Manufacturing Company, Milwaukee, Wisconsin.

The officers of the Association who have contributed so much toward its successful activity during the past year are:

President, W. L. RODGERS.

First Vice-president, H. L. BARKER.

Second Vice-President, R. D. HUNT.

Third Vice-president, JOHN ROCKE.

Treasurer, WILLIAM H. VOSS.

Secretary, RAYMOND MARSH.

Executive Committee.

F. H. BERGMAN.

H. G. BRAUNLICH.

P. V. D. BROKAW.

W. J. CONLON.

J. D. A. JOHNSON.

Advisory Committee.

E. H. MAYTAG.

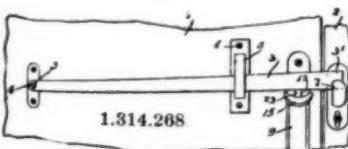
SAM T. WHITE.

L. E. DIETZ.

It was the consensus of those in attendance at the American Washing Machine Manufacturers' meeting that the purpose for which the organization was founded was notably furthered by the September gathering. That purpose is the encouraging and maintaining of better conditions in the trade and the establishing of sound, economic principles upon which such business may be transacted.

PATENTS DOOR LATCH.

United States patent rights, under number 1,314,268, have been granted to Alexander Gray Irwin and William George Irwin, Winnipeg, Manitoba, Canada, for a door latch described herewith.



The combination with a door having a vertically disposed cross slot therein, a door latch pivoted to the door and with the free end crossing the slot and a pair of handles permanently secured to the door and provided with slots registering with the door slot, of a thumb latch provided on the underside with a downwardly extending pivot lug socketed in the upper part of one of the handles and with a horizontally disposed extension extending within the slot in the door and a second thumb latch provided on the underside with a downwardly extending pivot lug socketed in the upper end of the other of the handles and fitted with a horizontally disposed extension passing into and through the

door and handle slots and positioned between the door latch and the former extension.

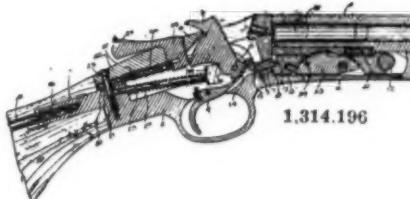
door and handle slots and positioned between the door latch and the former extension.

SARGENT AND COMPANY MOVE THEIR CHICAGO HEADQUARTERS.

For the purpose of obtaining more convenient quarters as well as with the intention of securing more advantageous location in the wholesale hardware district, Sargent and Company, manufacturers of hardware, New Haven, Connecticut, have moved their Chicago offices from 220 North Michigan Avenue to 221 West Randolph Street.

PATENTS BREAKDOWN SHOTGUN.

Thomas C. Johnson and Charles E. Blizzard, New Haven, Connecticut, assignors to the Winchester Repeating Arms Company, New Haven, Connecticut, have procured United States patent rights, under number 1,314,196, for a breakdown shotgun described in the following:



In a breakdown shotgun, the combination with the receiver and pivotal barrel thereof, of a sliding barrel-locking

bolt mounted in the receiver and extending rearwardly therein, and a hammer pivoted forward of the rear end of the said bolt the forward end of which is extended downward in front of the heel of the hammer, the said forward end of the bolt and the heel of the hammer being proportioned so that when the hammer is in its fully cocked position, its heel will engage with the forward portion of the bolt for holding the same in its locked position.

ISSUES COMPREHENSIVE CATALOGUE.

Catalogue Number 63 has just been issued by The Fred J. Meyers Manufacturing Company of Hamilton, Ohio. This booklet was printed to give the public an idea of the class and variety of wire, iron, and bronze work manufactured by that Company. It contains many illustrations of the different machinery guards, wire cloth, window guards, office railings, elevator enclosures, wire signs, metal signs, wire dipping and various other baskets, steel casting brushes, iron and wire gates, etc. The Fred J. Meyers Manufacturing Company of Hamilton, Ohio, will send this catalogue to anyone upon request.

REGISTERS TRADEMARK.

United States registration has been granted to the Oneida Community, Oneida, New York, under serial number 118,175, for the trademark shown in the accompanying illustration. The Company claims use since March 7, 1919, and the claim was filed May 5, 1919. The particular description of goods is game traps.

118,175
GIANT

WANTS CATALOGUES FROM HARDWARE JOBBERS AND MANUFACTURERS.

Being thoroughly of the conviction that goods of quality are essential to the successful building up of retail trade, H. C. Westphal is determined to carry the best trademarked lines in the new hardware store which he is opening October 1, 1919, at Reedsburg, Wisconsin. It is his intention to have a stock extensive and varied enough to meet all the local requirements and for this purpose he wants to receive catalogues and circulars from jobbers and manufacturers of hardware.

TRADEMARK IS REGISTERED.

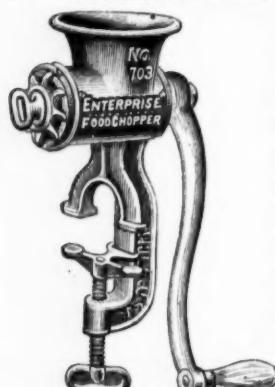
Under serial numbers 118,486 and 118,487, United States registration has been granted to the Simmons

CASTLEN

Hardware Company of St. Louis, Missouri, for the trademarks shown in the accompanying illustrations. The Company claims use on the former since 1894 and on the latter since September 17, 1894. The claims were filed May 14, 1919. The particular description of goods on both is: Shovels, spades and scoops.

FOOD CHOPPER HAS MANY USES.

The Enterprise Food Chopper Number 703 has four knives. The coarse knife is used for chopping hash, chicken and lobster for salad, hog's head cheese, etc. The medium knife is best for chopping corn for



Enterprise Food Chopper
Number 703, Made by
the Enterprise Manu-
facturing Company of
Pennsylvania, Philadelphia.

fritters, scrap meat for poultry, scrapple, codfish, etc. The fine knife is employed for chopping sausage and mince meat, cocoanut, grinding steak, stale bread and crackers for crumbs, and chopping croquettes. The fourth knife is for making nut butter from oily nuts and is called the nut butter cutter. With this chopper can be used a stuffing attachment that has a patented corrugated spout and prevents the air from entering the casing. In this way the preservation of the sausage is assured. To use this stuffing attachment, fit the chopper with the coarse knife and thumb screw and over these screw the attachment to the end of the cylinder. The Enterprise Food Chopper is an economical addition to every household and should be in every home. Dealers may obtain catalogue by addressing the Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pennsylvania.

Regardless of what the other fellow may be doing it is the duty of every merchant to strive to better conditions about his business in order that he may easily improve his standing among the merchants.

COUNSELS THRIFT IN MAILING.

Many hardware dealers have occasion to send goods to customers by parcels post. This may seem a simple matter, yet it offers an opportunity for the practice of thrift which ought not to be neglected. The following instructions for preparing parcels for the mails are issued by the postmaster of Chicago and are worth careful reading and observance:

When a post office receives a million or more parcels a day it makes a tremendous difference in its efficiency if any considerable number is badly packed or addressed.

We are interested in the "Occasional Mailer" particularly, for inexperience is at the root of the trouble. To this class a brief course in "Postal Preparedness" will be the means of preventing the annoyance occasioned by loss of time and effort.

Your post office parcels then, must be prepared with particular attention to:

- (a) The Contents.
- (b) The Packing, Wrapping, Tying.
- (c) The Addressing.

Give these things some thought before beginning your parcel; it will pay.

Contents:

1. Things that can be crushed—Hats, cigars, toys, cakes, candies, etc.
2. Things that will break—Records, instruments, china, glass, etc.

Packing, Wrapping, Tying.

Pack 1 and 2 in excelsior, cotton, soft paper, etc., according to their nature. Wrap in strong paper and enclose in outer cover of double corrugated paper board or wooden box. If parcel is long and narrow (umbrella, etc.) pack in strips of wood. Tie parcels lengthwise and crosswise with heavy twine.

Contents:

3. Things that may break or cut other things—Hardware, machine parts, knives, tools, heavy goods generally.

Pack so as to cover all edges or corners with canvas or cloth, or wood when points are sharp. Outer cover of wood or reinforced corrugated paper board. Tie as directed.

Contents:

4. Things that will rot, or things that if broken will spoil other things—fowl, fish, meat, berries, liquids, fruits, etc.

Pack in corrugated containers that will retain contents if damaged; liquids in special container surrounded by absorbent material. Put special stamps on parcels containing foodstuffs to expedite delivery. Tie as directed.

Contents:

5. Things not vulnerable under ordinary conditions—Materials, clothing, silks, cottons, shoes, gloves, lingerie, laundry, etc.

Wrap compactly and thoroughly in tough, heavy paper. Tie as directed. Do not use cardboard boxes; they go to pieces under pressure.

Save the Material you get with goods from the stores and use it to pack, wrap and tie the parcels you

send away by mail; to be forehand in this respect is half the battle.

Addressing: Full and Legible for Best Results.

Write name and address of addressee in lower right hand corner of parcel cover and the sender's in the upper left hand. As a precaution put sender's card inside the parcel. Don't use a tag for addressing, but if you must, use a linen one and sew it flat to the parcel if cover is of canvas or cloth but tack it on if the cover is of wood. If parcel is a suit case, etc., paste the address label on. Remove old stamps and old addresses from egg and suit cases, etc. Affix postage stamps to upper right hand corner of parcel cover. Mark "fragile" on breakable parcels, and "perishable" on foodstuffs conspicuously near the address.

Parcels locked or sealed pay 2 cents an ounce postage.

Let us add that it is against the law to mail alcoholic liquors, poisons or inflammables; or parcels more than 84 inches length and girth combined; or weighing more than 70 pounds in Zones 1, 2 and 3 or more than 50 pounds in Zones 4, 5, 6, 7 and 8.

You can insure or C. O. D. parcels up to \$100 in value and you may send them by Special Delivery.

You will be asked by the Post Office clerk to state contents to determine whether parcels are fragile, perishable, liquifiable or plain ordinary. This is to protect your parcels and the answer must be forthcoming. Such is the Post Office responsibility, as the proper preparation of the parcel is yours.

Mail parcels at substations (in stores), stations, or the Post Office, but if you have a quantity mail them at the Post Office or stations, as the substations have only limited facilities. Never leave parcels on top of street boxes.

Foreign parcels accepted only at the Post Office or stations. Special instructions.

Mail your parcels early: They will be collected first, despatched first and delivered first. This practice will also lighten the labor of letter carriers and clerks.

Domestic Parcel Post Rates of Postage.

One cent an ounce to 4 ounces for merchandise.

One cent each two ounces to 8 ounces for books.
Zone Rates:

First Pound.	Additional Pounds.
Local	5¢
First	5¢
Second	5¢
Third	6¢
Fourth	7¢
Fifth	8¢
Sixth	9¢
Seventh	11¢
Eighth	12¢

1¢ each 2 lb. thereafter
1¢ each 1 lb. thereafter
1¢ each 1 lb. thereafter
2¢ each 1 lb. thereafter
4¢ each 1 lb. thereafter
6¢ each 1 lb. thereafter
8¢ each 1 lb. thereafter
10¢ each 1 lb. thereafter
12¢ each 1 lb. thereafter

Miscellaneous printed matter over 4 pounds at Parcel Post Zone Rates:

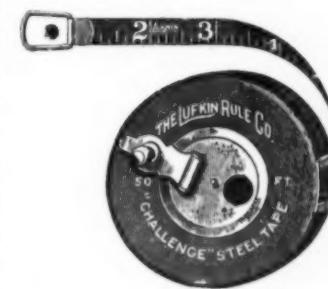
Fractions are charged as full pounds.

Insurance 3¢ to \$5; 5¢ to \$25; 10¢ to \$50; 25¢ to \$100.

C. O. D. 10¢ to \$50.00; 25¢ to \$100.00 includes insurance.

GUARANTEES ACCURACY OF TAPE.

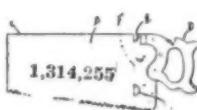
The "Challenge" Steel Measuring Tape, made by The Lufkin Rule Company of Saginaw, Michigan, is shown in the accompanying illustration. This tape comes in metal lined hard leather case with nickel plated trimmings, folding flush handle and is opened by pressing the pin on the opposite side. The Company guarantees the measurements to be accurate. The "Instantaneous" readings originated with The Lufkin Rule Company. This consists of repeating the foot marks at each inch in small but plain figures. In this way, the total reading is directly before the eye and eliminates errors and saves time. The "Challenge" tape also has the Nubian finish. This style of finish is supplied on all etched steel tapes made by the Company. The ribbon is given a dead black finish and the graduations and figures appear in bright natural finish, thus producing a marked contrast. This wears well, is rust-resisting and improves the appearance of the tape. The Lufkin Rule Company of Saginaw, Michigan, will be pleased to send catalogue to those interested.



Challenge Steel Measuring Tape,
Made by The Lufkin Rule Company,
Saginaw, Michigan.

SECURES PATENT FOR SAW.

Albert Edward Edmondson, Ottawa, Ontario, Canada, has obtained United States patent rights, under number 1,314,255, for a saw described in the following:



A saw provided with the usual handle and having a straight back, a notch cut in said back near said handle, one side of said notch being straight and at right angles to the said back, a slot punched out of said saw near the toothed side of same, said slot having one straight side, and said side being in line with the straight side of said notch.

OPPORTUNITIES FOR FOREIGN TRADE PRESENTED BY BUREAU OF FOREIGN AND DOMESTIC COMMERCE.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

30512.—An American firm with branch offices in the principal cities of Europe desires to secure agencies for the sale of hardware. Reference.

50519.—A merchant from Cyprus, who is in the United States for a short time, desires to secure an agency for the sale in Cyprus and Syria of roofing material, hardware, paints, cutlery, etc. Reference.

30526.—A merchant in Italy desires to be placed in communication with firms for the sale of metals in general, but especially pig and manufactured copper, and general mer-

chandise. Correspondence may be in English. References.

30529.—Agencies are desired by a firm in Australia for the sale of cylinder latches and other good lines of locks, such as cabinet, mortice, and rim locks, door checks, and padlocks; pressed hollow ware, particularly aluminum, food choppers, and other household articles; vapor stoves and blow lamps; lawn mowers, builders' hardware, and brass foundry; hat and coat hooks, and metal and wood screws. Quotations should be given f. o. b. New York. Payment, credit terms (eight or 30 days). References.

30531.—A firm in Denmark (wholesale distributors) desires to secure agencies for the sale of agricultural implements, tools, metal products, etc. References.

30537.—An instructor of athletics in Czechoslovakia desires to purchase and also secure an agency for the sale of sporting and athletic goods of all kinds. Payment in United States currency. Correspondence may be in English. References.

30538.—An agency is desired by a man in France for the sale of agricultural implements, general merchandise, etc. Reference.

30541.—A commercial agent in Spain desires to secure an agency for the sale of tin plate, hardware, etc. References.

30546.—An automobile sales company with repair shops and garage in Czechoslovakia desires to purchase and secure an agency for the sale of motor trucks, automobiles, accessories, and tires. Payment to be in United States currency. Reference.

30547.—A traveling salesman in France desires to secure an agency for the sale of tools and household articles in tin or enamel. Quotations should be given c. i. f. destination. Correspondence should be in French or Spanish. Reference.

30550.—The representative of a firm in the Canary Islands is in the United States for a short time, and desires to secure an agency for the sale of hardware, paints, tools, general merchandise, etc. Reference.

30551.—A commercial agent in Cuba desires to represent in San Domingo, Porto Rico, the Dutch West Indies, and in Cuba, manufacturers of paints, varnishes, colors, enamels, stains, and hardwares, on a commission basis. Correspondence may be in English. Reference.

30556.—An agency is desired by a man in Italy for the sale of agricultural and general machinery, tools, metals, etc. Correspondence may be in English. References.

30559.—A firm in Czechoslovakia desires to purchase and also secure an agency for the sale of agricultural implements. Correspondence should be in Polish or Russian.

30560.—A mechanical engineer in Italy desires to secure an agency for sale of builders' and general hardware, tools, metals, etc. Correspondence should be in Italian. References.

30565.—A merchant in France, with agencies in the principal cities of Europe, desires to secure the representation of firms for the sale of general merchandise. Correspondence may be in English. Reference.

30568.—A commercial agent in Switzerland desires to secure an agency for the sale of scissors, knives, silver-plated ware, razors, razor strops, spiral drills, tools, and household articles. Correspondence should be in French or German.

COMING CONVENTIONS.

The American Hardware Manufacturers' Association Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 15, 16, and 17, 1919. F. D. Mitchell, Secretary, 4106 Woolworth Building, New York City.

The National Hardware Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 15, 16, and 17, 1919. T. James Fernley, Secretary, Philadelphia, Pennsylvania.

Automobile Accessories Branch of the National Hardware Association, Hotel Sherman, Chicago, Illinois, December 8 and 9, 1919. A. H. Nichols, Chairman, Detroit, Michigan.

Oklahoma Hardware and Implement Association, Oklahoma City, Oklahoma, December 9, 10, and 11, 1919. W. B. Porch, Secretary, Oklahoma City, Oklahoma.

Pacific Northwest Hardware and Implement Association, Davenport Hotel, Spokane, Washington, January 20, 21, 22 and 23, 1920. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Oregon Retail Hardware and Implement Dealers' Association, Imperial Hotel, Portland, Oregon, January 27, 28, 29 and 30, 1920. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 4, 5, and 6, 1920. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Michigan Retail Hardware Association, Hotel Pantlind, Grand Rapids, Michigan, February 10, 11, 12 and 13, 1920. Exhibit in Furniture Exhibition Building. Arthur J. Scott, Secretary, Marine City, Michigan.

Pennsylvania and Atlantic Seaboard Hardware Association, Bellevue Stratford Hotel, Philadelphia, Pennsylvania, February 10, 11, 12, and 13, 1920. Exhibition in Philadelphia Commercial Museum. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh, Pennsylvania.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 17, 18, 19 and 20, 1920. H. O. Roberts, 1030 Metropolitan Life Building, Minneapolis, Minnesota.

New York State Retail Hardware Association, Onondaga Hotel, Syracuse, New York, February 17, 18, 19 and 20, 1920. Exhibition in State Armory. John B. Foley, Secretary, 607 City Bank Building, New York City.

Missouri Retail Hardware Association, St. Joseph Auditorium, St. Joseph, Missouri, February 17, 18, and 19, 1920. F. X. Becherer, Secretary, 5136 North Broadway, St. Louis, Missouri.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 23, 24, and 25, 1920. George A. Fiel, Secretary, 10 High Street, Boston, Massachusetts.

Ohio Hardware Association, Hotel Gibson, Cincinnati, Ohio, February 24, 25, 26 and 27, 1920. James B. Carson, Secretary, Dayton, Ohio.

Stove Founders' National Defense Association, Boston, Massachusetts, May 11, 1920. R. W. Sloan, Secretary, 826 Connell Building, Scranton, Pennsylvania.

National Association of Stove Manufacturers, Boston, Massachusetts, May 12 and 13, 1920. Robert S. Wood, Secretary, National State Bank Building, Troy, New York.

RETAIL HARDWARE DOINGS.

Indiana.

The LaGrange Hardware Company, LaGrange, is remodeling its building and enlarging its quarters.

Iowa.

Hall and Watts have sold their hardware and implement store at Marathon to E. G. Smith.

Hatch and Larson, Marathon, have bought the Hitchcock hardware business.

Kansas.

M. M. Jordan has sold his hardware store at Turon to A. B. Everly.

The hardware store of T. B. Vallete and Son, Salina, has been sold to J. W. Craner and Son of Leavenworth.

Galvin Roach has taken charge of the Hugoton Hardware Store at Hugoton.

The Farmers Union has purchased the T. K. Kennedy hardware store at Haven and will take charge as soon as the stock can be invoiced.

Sells and Rawk, Muscotah, have discontinued their hardware and implement business in that town and move their stock to Effingham.

Minnesota.

Ed Aldrich has sold his hardware store at Aldrich to B. L. Benedict.

E. Latourell of Paynesville has sold his business to N. P. Mahon and Fred Schroeder.

Missouri.

The Carter Hardware Company, Carthage, has bought the stock of the Kiem and McMillan Hardware Company.

McManus and Welch have opened a hardware store at Baring.

Nebraska.

Henry Gewecke has sold his hardware store at Geneva to L. W. Hill.

S. E. Sorenson has been succeeded in the hardware business at Rockville by Hans Johnson.

North Dakota.

The hardware and implement store of Dittus Brothers at Elgin was destroyed by fire, the loss being \$6,500.

Ohio.

Frank Shaffer is negotiating for the purchase of the Savage hardware store at Bellefontaine. He is trading a farm for the store.

Oklahoma.

M. O. Foster has repurchased the J. S. White Hardware Company's business at Alex.

The Thurston-Seran Hardware Company, Wewoka, is being conducted by A. M. Seran and W. I. Thurston and will carry a complete line of shelf hardware, builders' supplies, implements, etc.

Texas.

W. H. Kiser has sold his hardware business at Tumble to his partner, M. W. Jamison.

The Rex-Hocker Hardware Company, San Antonio, has been chartered with \$10,000 capital by William Rex, P. M. Hocker and C. S. Scott.

The Walker and Leigh hardware store has just opened for business at Huntsville.

Wisconsin.

Melvin Kittleson has purchased an interest in the Blanchardville Hardware Company at Blanchardville.

ADVERTISING CRITICISM AND COMMENT

Helpful Hints for the Advertisement Writer

The "we" is never as effective as the "you" in advertising. The announcement of Kunath Sons in the *Advertiser-Gazette* of Creston, Iowa, begins with the "we" and its only use of the "you" is in the weak



We handle all kinds of paints, wall paper, varnishes, enamels, etc. In addition we have an especial liquid wax, a polish to be used on all high grade furniture.

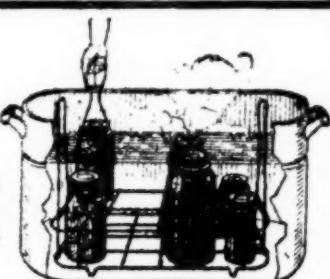
Kunath Sons

form of an interrogation. Mechanically, the copy is strongly set forth and strikingly illustrated. But the text needs revision. It ought to be rewritten from the side of the prospective purchaser of paints, varnishes, and kindred supplies.

* * *

The Towner Hardware Company has a persuasive slogan in the words, "The Store Where Your Dollar

*Can
the Cold
Pack Way*



We are headquarters for Fruit Cans, Canning Racks, Preserving Kettles and everything to make your canning easy.

Take the elevator to our housefurnishing department for things to help you can.

**Towner Hardware
Company**

The Store Where Your Dollar Does Its Duty.

"Does Its Duty." But the slogan does not get a chance to do its full duty in the advertisement herewith re-

produced from the *Muskegon Chronicle*, Muskegon, Michigan. Demand for proof is not an exclusive habit of people from Missouri. The average customer wants something more definite in advertisements than declaration that a store is headquarters for a given line of goods. He or she is, first and foremost, interested in the relation of price to quality. In the matter of the canning racks illustrated in the advertisement under discussion, a much more profitable text could be composed which would include prices and emphasize quality.

* * *

From an artistic point of view no defects can be pointed out in the advertisement of Hall's Hardware, which appeared in *The West Virginian*, Fairmont,

Everlastingly Dainty Chinaware



Every woman appreciates pretty china and we are sure that the women of Fairmont will be agreeably surprised with this big lot of fine chinaware we have collected for their choosing.

Whether you wish to purchase an entire new set of dishes or to buy just a few needed pieces you'll find what you want here.

The assortments include plain white, gold stripe and blue or fancy colored patterns. Many kinds to choose from too—including heavy china for kitchen use, breakfast sets and the finer grades for dining room use. Visit the store and see these new arrivals.

Hall's Hardware

West Virginia. Being designed primarily for women, the text is appropriately worded and illustrated. But, unless the women of Fairmont differ radically from their sisters in other parts of the world, they are keenly interested in the question of prices whether of chinaware or frocks. Hence, the advertisement lacks conclusiveness in this respect. It gives no idea of comparative costs to the buyer; and in these days of high prices some assurance on this head is of importance in soliciting trade.

* * *

The greatest races, nations and individuals are those who spend the least time in harboring resentments.

HEATING AND VENTILATING

WILL DEDICATE NEW LABORATORIES OF BUREAU OF MINES.

Heating engineers and others who are interested in the problem of obtaining greater efficiency in the burning of coal, especially since the increase in the price of coal has made the problem even more urgent than ever before, will attend the dedication of the new million dollar laboratories of the Bureau of Mines, Department of the Interior, in Pittsburgh, Pennsylvania, September 29, 30, and October 1, 1919.

The fuel investigations of the Bureau of Mines constitute a large and important part of the work of the Bureau and ample recognition of this fact will be seen in the arrangements of the new laboratories and their equipment for the highest grade of research and routine work. It is here that typical coals, gathered from all parts of the country, are analyzed and tabulated in such a manner as to give to the public general information of the coal fields of the country. It is also here that the actual experiments in the combustion of coal take place under experts and their findings given publication.

So far has this work advanced, the National Fuel Administration, organized during the war to urge the greatest conservation of fuel as a means of helping to win the war, builded on the work of the Bureau of Mines and distributed to the public a large number of the publications of the Bureau, and also called upon the Bureau in an advisory capacity in many cases.

The Bureau of Mines has been the pioneer in the combustion experiments in the United States and has already issued a number of reports that are well known to engineers and firemen. It is expected that engineers and men familiar with combustion experiments will attend the dedication showing their interest in Government research in this fundamental field.

The dedication ceremonies promise to bring to Pittsburgh for the three days the most prominent mechanical engineers and mining and metallurgical men of the nation.

The Bureau of Mines, in cooperation with the Pittsburgh Chamber of Commerce, has already completed an elaborate program of events which includes the presence of high Government and State government officials besides the leading men of scientific and mining thought in the country. The ceremonies proper open on Monday morning, September 29. The evening before, Sunday, September 28, there will be reception committees at the various leading hotels to receive the guests. On Monday morning the new laboratories at 4800 Forbes Street will be open for inspection and at 10:30 o'clock the dedicatory ceremonies will be held on the lawn in the rear of the laboratories with Dr. Van H. Manning, Director of the Bureau, presiding. After invocation by Dr. S. B. McCormick, Chancellor

of the University of Pittsburgh, there will be an address of welcome by Honorable E. V. Babcock, Mayor of Pittsburgh. Response will be made by the Honorable Franklin K. Lane, Secretary of the Interior, to be followed by addresses by Horace B. Winchell, President of the American Institute of Mining and Electrical Engineers, John L. Lewis, Acting President of the United Mine Workers of America, and the Honorable William C. Sproul, Governor of Pennsylvania. The formal ceremony of handing over the keys of the building by Secretary Lane to Director Manning will follow.

After luncheon at the Bureau of Mines buildings, the guests will board special trains on the Baltimore and Ohio Railroad to the Experimental Mine of the Bureau of Mines at Bruceton, Pennsylvania, fourteen miles from Pittsburgh. Upon arrival there a pre-arranged explosion of coal dust will take place in the Experimental Mine as a demonstration to the visitors and after that there will be an inspection of the mine and the explosives testing plant, the guests returning to the city at six o'clock in the evening. At 8:00 o'clock there will be a general meeting at the Carnegie Music Hall under the auspices of the Pittsburgh Chamber of Commerce, with an address by Secretary Lane, an organ recital by Dr. Chas. Heinroth, and a moving picture prepared by the National Coal Association, "The Story of Coal," will be given a first presentation.

On Tuesday, September 30, the new laboratories will be open for inspection by the guests the entire day and at 2:00 o'clock the elimination contests in the National Safety First-Aid and Mine-Rescue Meet will be held at Forbes Field, also the awarding of the state championships. At 5:00 o'clock, at Forbes Field, there will be a demonstration of the explosibility of coal-dust, and at 8:00 o'clock the Chamber of Commerce will present a pageant typifying the spirit of the mining industry with music by the band of the Carnegie Institute of Technology.

On Wednesday, October 1, at 9:00 a. m., there will be a final mine-rescue contest by the ten successful teams of the previous day at Forbes Field with a presentation of the National cups and prizes. At 2:00 o'clock in the afternoon announcement of the J. A. Holmes Safety Association will be made by Dr. Van H. Manning. At 2:30 o'clock the final first-aid contest participated in by the twenty best teams of the previous day for the gold cups and prizes will be held. At 5:00 o'clock there will be a demonstration of a coal-dust explosion at Forbes Field, the events closing with a smoker at the Chamber of Commerce in which the prizes will be awarded and speeches made.

We are always afraid of the man who loses his temper when asked to put an agreement in writing.

COLLECTIVE ADVERTISING PROMOTES INTERESTS OF INDIVIDUAL PRODUCERS AND DEALERS.

Collective advertising is no longer in the experimental stage. Definite data have been gathered and classified as to its benefits. The case of the cypress lumber manufacturers is an illustration. Although in active competition for orders, these lumber producers combined in a publicity campaign for educating the public to the superior advantages and durability of cypress lumber. The results of this educational propaganda—which is still carried on—have been of the tangible sort capable of estimation in dollars and cents. New demand has been created which redounded to the general welfare of the industry and to the profit of individual cypress manufacturers.

The principle thus exemplified is applicable to the warm air heater industry. It is being utilized by the Roofing, Metal, and Heating Engineers of Philadelphia, Pennsylvania, not only for the purpose of increasing the use of warm air heaters but also to correct evils of installation which have militated against the popularity of this effective system of heating. The first collective advertising put forth by this enterprising association was in the form of a full page appeal to the public in the following words:

"Better Heating. How to get more and better-directed heat out of coal is interesting to every homeowner, investor, builder and architect; and now is the time to think and act on it.

"That there is need for action was shown to us by our experience with the Fuel Administration during the war. The figures brought to our attention on the waste of coal were staggering; and we found that the fault lay mostly in the individual home. Your home and your neighbors.

"The cause of this waste, we found, is that the majority of heating systems in Philadelphia have been improperly installed by unskilled contractors. The result each winter is insufficient heat, misdirected heat, waste of coal and an epidemic of diseases.

"As Heating Engineers we propose to correct these conditions. The problems are small in the hands of experts. We also suggest that all work on heating systems be done now. It is more economical and satisfactory to have cleaning and repairs done in the spring and summer months. Every system needs attention after a winter's use.

"This Association of over a hundred skilled Heating Engineers places its combined experience at the command of the public. There's an Association member in your neighborhood—and we want to give you his name so you may enjoy better and more economical heating next winter. It will pay you to Phone, Write or Call for Free Booklet. Join the movement for Better Heating Today."

The foregoing advertisement concludes with the address of the Association. By reason of its collective character, it gives an impression of helpful disinterestedness, which is an invaluable factor in resultful publicity. No one familiar with the conditions of the warm air heating industry will hesitate to approve this kind of publicity. It needs to be duplicated in all

parts of the country in order that the warm air heater may be popularized to the lasting benefit of all concerned.

VENTILATING ENGINEER TAKES PART IN NATIONAL RIFLE MATCH.

It is known that ventilating engineers are men of varied sympathies and versatile wit. It is not strange, therefore, to find a place of prominence in the National Rifle Match being occupied by a ventilating engineer—Major James W. H. Myrick of Boston, Massachusetts. In the recent shooting tourney, at Caldwell, New Jersey, he was captain of the Massachusetts civilian rifle team. The team was made up principally of men from the Ancient and Honorable Artillery Company and the Fusilier Veteran Corps, of Boston, with whose activities Major Myrick has long been identified.

IS VERY EASY TO INSTALL.

The adjustable ventilator, made by The Hart and Cooley Company, New Britain, Connecticut, shown in the accompanying illustration, is very easy to install. It is designed to carry surplus heat from a lower to an upper floor room. These ventilators are complete, ready for installation, each consisting of one "H & C" black floor register, and one "H & C" white face, attached to a tin box which is adjustable from seven to twelve inches in depth. The Hart and



H & C Adjustable Ventilator, Made by The Hart and Cooley Company, New Britain, Connecticut.

Cooley Company also makes the well-known "H & C" gratings for pipeless heaters. These are finished in black or oxidized copper, in all sizes from 20x20 to 44x48. The sizes of the pipe collar vary to suit requirements. They are simple, durable and efficient and eliminate the collection of dust. By addressing The Hart and Cooley Company, New Britain, Connecticut, dealers will secure full particulars and a copy of the Company's new catalog. Branch offices are located at 73 East Lake Street, Chicago, and 100 Lafayette Street, New York City.

PROSPERITY HINGES ON PRODUCTION.

Prosperity has but one possible basis. That basis is production. Volume of business in tons and dozens and bales is its true measure. There is now no fundamental reason to deter production, and, not until it has increased to its new peace-time proportions can we rest in the assurance that, as far as its effects on

our economic life are concerned, the war has passed into history. To this end, every man and woman industrially or commercially employed must produce to capacity. Not only is production essential, but capital must be accumulated at a rate rapid enough to offset the destruction which took place during five years. The consuming public must recognize that it can not continue indefinitely the scale of expenditure which followed as a reaction from the self-denial of war, but that thrift for personal benefit is as essential as thrift for one's country. When every individual capable of gainful employment is producing to capacity its effects on our economic adjustment will be complete.

IS CONVENIENTLY CONSTRUCTED.

The Magee Furnace Company of Boston, Massachusetts, has put on the market a one pipe warm air heater. It burns hard coal, soft coal, and wood. The fire pot is made in two sections, ribbed, and the inside is straight. The combustion chamber is made so that complete combustion is secured. The ash pit is square and deep, thus allowing for a large air space underneath the grates. This construction makes it easy for the removal of ashes. The inner base ring and the ash pit bottom with connecting flanges on which the ash pit rests, are cast in one piece. This gives a firm foundation. The Magee Dock Ash Grate is particularly commendable. Its size is carefully proportioned to the fire pot space, combustion chamber and flues in order to obtain fuel economy and complete combustion. Those who address the Magee Furnace Company, 38 Union Street, Boston, Massachusetts, will receive full information, circulars and catalogue. The Western representative is Robert P. Burton, 30 West Lake Street, Chicago, Illinois.

CONFIRMS EXCLUSIVE TRADEMARK RIGHT.

Under serial number 80,063, United States registration has been granted to The Henry-Miller Foundry



Company, Cleveland, Ohio, for the trademark shown in the accompanying illustration. The Company claims use since March 20, 1913, and the claim was filed September 7, 1915. The particular description of goods is warm air heaters.

DISCUSS CONTROL OF ATMOSPHERE.

Notwithstanding strange terms sounding like a mixture of Syrio-Chaldaic Armenian, and golf, heating and ventilating men will find themselves in familiar surroundings during the Fifth National Exposition of Chemical Industries to be held during the week of September 22 to 27, 1919, at the Coliseum and First Regiment Armory, Chicago, Illinois. One of the noteworthy things at the exposition will be a demonstration of methods for air conditioning. Devices which are the product of chemical engineering

will be shown by means of which it is practical to regulate the amount of moisture in the atmosphere of a building. In cases where the air is too dry, the right degree of moisture is automatically supplied by the machine which reverses its operation when the opposite effect is desired, namely, that of reducing excessive humidity.

INCORPORATES TO MAKE WARM AIR HEATER PIPE AND FITTINGS.

For the purpose of manufacturing warm air heater pipe and fittings, the Superior Safety Furnace Pipe Company has been incorporated for \$50,000, in Detroit, Michigan. The officers of the company are: President, John F. Burkhardt, an experienced warm air heater installer; vice-president and treasurer, Henry Chambers, contractor in Detroit for many years; and William A. Vernier, secretary, formerly assistant sales manager of a Detroit firm engaged in the same line of business.

CONTAINS VALUABLE INFORMATION.

The American Foundry and Furnace Company, Bloomington, Illinois, has just gotten out its new Catalogue C. This catalogue is printed on highly finished super-calendered paper with a deckled effect cover. It has eighteen pages and contains valuable information on the home heating problem. There are many halftone illustrations of the Company's warm air heaters, and the different accessories also made by it. Dealers can secure a copy of Catalogue C by addressing the American Foundry and Furnace Company, Bloomington, Illinois.

DELAYS ARE FATAL TO SUCCESS.

The Bulletin of the Philadelphia Credit Men's Association points out the evils of procrastination in the following terse paragraphs:

He was just going to help a neighbor when he died.

He was just going to pay a note when it went to protest.

He meant to insure his house, but it burned before he got around to it.

He was just going to reduce his debt when his creditors "shut down" on him.

He was just going to stop drinking and dissipating when his health became wrecked.

He was just going to introduce a better system into his business when it went to smash.

He was just going to quit work awhile and take a vacation when nervous prostration came.

He was just going to provide proper protection for his wife and family when his fortune was swept away.

He was just going to call on a customer to close a deal when he found his competitor got there first and secured the order.

The Utica Heater Company, Utica, New York, has plans for an addition, one story, to its plant at Whitesboro, New York.

PRACTICAL HELPS FOR THE TINSMITH

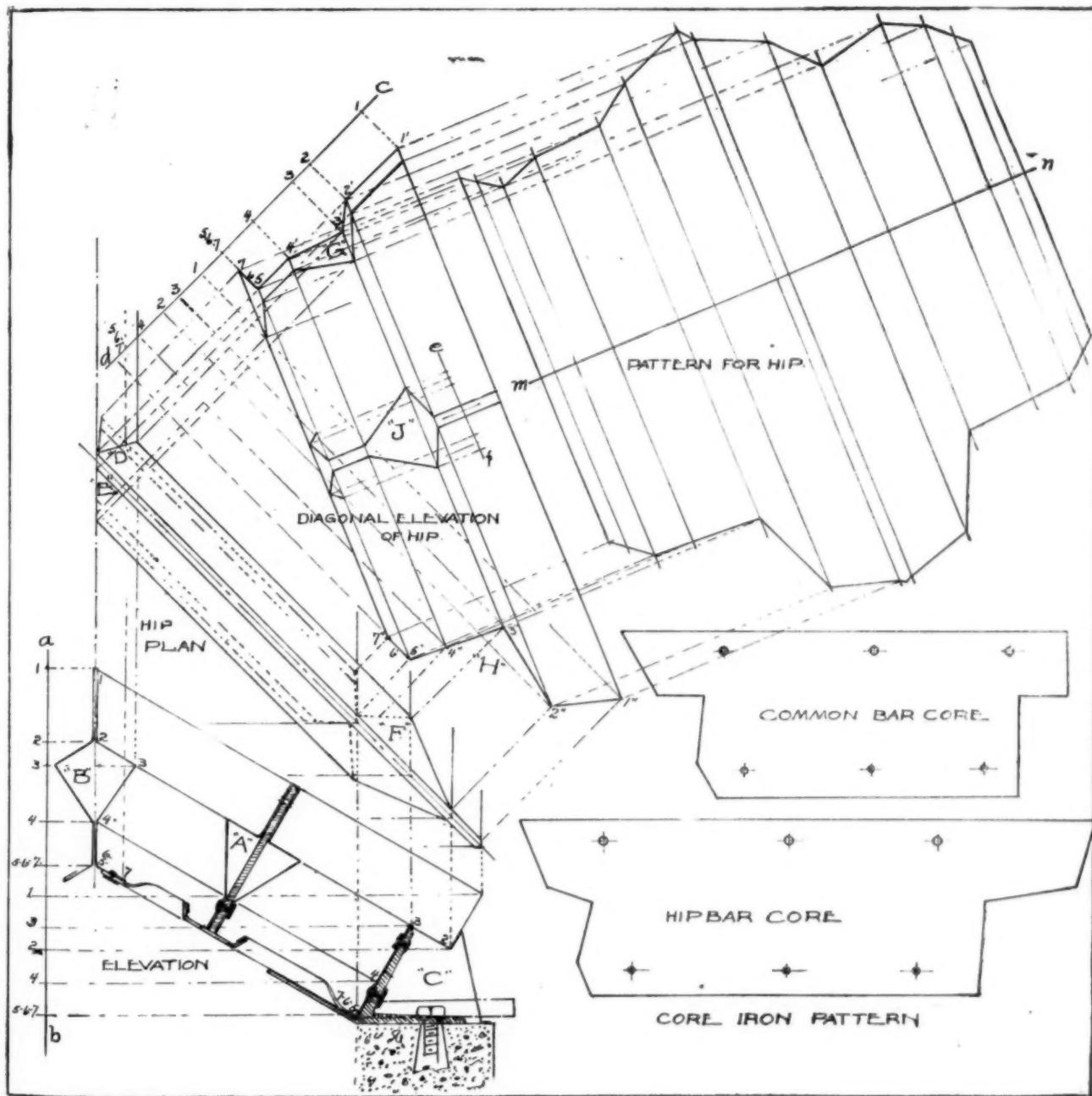
PATTERN FOR HIP BAR SKYLIGHT.

By O. W. Kothe.

The hip bar development gives most workmen trouble in laying out. This is because it is not understood. Hip lines are always placed on a 45 degree, and this makes them longer than the common bar.

gives it the same projection and miter lines "D"-“E” and “F” to suit the ridge and curb of elevation. These points must be closely watched so that proper lines intersect.

If we consider this hip plan and would raise the ridge end up to equal the height of elevation—then by looking at it from a right face view we would see



Hip for Skylight.

Observe the hip bar has the same altitude as common bar, but take on a different pitch, because the base line is longer.

The same working drawing we had in last issue may be used, but for convenience here, the elevation is dropped below plan with the jack bar treatment omitted. The hip plan must be developed from elevation, which

the diagonal section through hip. As this is what we actually must do we raise it up and lay it down on the paper as the diagonal elevation of hip.

Draw a line as a-b in front of elevation and from each point as 1-2-3-4, etc., of ridge "B" and curb "C" project lines over as shown. Observe that this places all the altitudes between point of ridge and curb on

a straight line. Notice distance 1-1 is the rise of the top line. Distance 2-2 is the rise for glass shoulder line. All are parallel to that top line. Now by picking these distance in numerical order from line a-b and set them on line c-d, which line is at right angles to hip line plan. By squaring out lines from these points, and squaring up lines from points in miter "D" and "F" the miter 1'-2'-3'-4', etc., at the top is established, also 1"-2"-3"-4", etc., at the bottom.

Join these points with lines and see that they are all parallel. Next project lines from miter "E" of plan to intersect diagonal elevation lines which gives the other miter cut and finishes the ridge as at "G." It is necessary to develop a true section for hip both for the girth and angle of glass shoulder. To do this draw any line as e-f and on it step the width of spaces from section "A", extend points to correspond with lines and at the intersection we are able to draw the developed section through hip "J".

Pick the girth from this section "J" and set it off on line m-n and proceed to project the pattern as lines indicate.

Laps for riveting must be allowed extra. Rivet and bolt holes can also be developed from the common bar to place all on a straight line. The core bar patterns are mere reproductions of elevation placing rivet and bolt holes to suit holes in other patterns. The layout who does this should understand to develop the holes direct from elevation and plan. In this way all work will be uniform. Top and bottom cap strip must be gotten out to suit the gutter at bottom of section "S" and the glass shoulders. A stay should be cut out to fit against the section "J" so the brake hands form all angles exactly true. If this work must be shaped up afterwards, it causes much worry and work that is unnecessary.

ST. LOUIS SHEET METAL TRADE IS TO HAVE JOINT PICNIC.

The cordial relation obtaining between the Sheet Metal Contractors' Association and the Sheet Metal Consumers' Protective Association of St. Louis, Missouri, is proverbial in the trade. It receives additional emphasis from the union of the two organizations in the eighth annual outing and basket picnic to be held at Bartold's Grove, 7900 Manchester Avenue, Maplewood, Missouri, all day Sunday, September 14, 1919. Special attractiveness is given to the program by the amplitude and variety of prizes for the various contests—the gifts of manufacturers and jobbers of sheet metal material and supplies in the St. Louis territory. The program of the day opens at 10:15 a. m. with a horseshoe game for members and non-members, employers engaged in sheet metal industries. This promises to be an exciting display of rivalry for the reason that some of the most proficient experts at quoits are numbered in the ranks of the two organizations.

At two o'clock in the afternoon the annual ball game for the challenge cup is to be played between the Sheet Metal Contractors' Association and the Sheet Metal Consumers' Protective Association. Rain checks, score cards, and grandstands are to be free. The sheet metal men of St. Louis play a fast and

snappy game. It is, therefore, expected that the ninth inning will have been ended in ample time to permit of the races and contests beginning on schedule at 3:30 p. m. The program for this part of the day is as follows:

100 yard dash—boys over 12 years;
75 yard dash—boys under 12 years;
100 yard dash—men, free for all;
100 yard dash—members only;
75 yard dash—girls over 12 years;
50 yard dash—girls under 12 years;
75 yard dash—for ladies;
75 yard dash—for married ladies;
Chicken fight;
Pig drawing for men;
Pig drawing for ladies;
Guessing contest for ladies only;
Goose race, free for all ladies.

The races and contests are to be followed by dancing. At 5:30 p. m. the awarding of prizes takes place in the dancing pavilion. Three prizes are to be given for the best equipped timmers' truck, in addition to the premiums dispensed to the winners of the various games and races. The Joint Picnic Committee consists of:

Richard J. Klohr, Chairman	
William Koelsch	Julius Gerock
F. B. Higgins	H. J. Foerster
F. T. Bokern	J. J. Robertson
A. P. Faessler	John F. Ruth
W. E. Kraft	

The Reception Committee is:

Mr. and Mrs. Higgins, Chairmen
H. J. Foerster and Mrs. Foerster to be ;
Mr. and Mrs. Robertson;
Mr. and Mrs. Ruth;
Mr. and Mrs. Gerock;
Mr. and Mrs. Faessler;
Mr. and Mrs. Kraft;
Mr. and Mrs. Bokern;
Mr. and Mrs. Koelsch;
Mr. and Mrs. Klohr;
Mr. and Mrs. Symonds.

The Floor Committee consists of the following:

Herberg J. Foerster, Musical Director,	J. J. Robertson
assisted by	
Miss Marie Higgins,	
W. E. Kraft	
Frank T. Bokern is the High Chief of Contests.	

Taking into account the enthusiasm which marks all the activities of both organizations, it may safely be predicted that the eighth annual outing of the St. Louis Sheet Metal Contractors' Association, and the Sheet Metal Consumers' Protective Association will establish a new high water mark of jollity and good fellowship for the sheet metal trade of St. Louis.

ALLEGES DISCRIMINATION IN FAVOR OF PITTSBURGH BASE PRICES.

Advices from Duluth, Minnesota, are to the effect that civic organizations in that city have filed petitions with the Federal Trade Commission against the Pittsburgh plus basing arrangement for steel prices. Their contention is that the present basing system is unfair to the Northwest, and they urge that Duluth be named as a basing point for steel prices. A similar petition has been filed by the Commercial Club of Superior, Wisconsin. In addition to these petitions, a formal statement has just been presented to the Federal Trade Commission by the Western Association of Rolled Steel Consumers in which it is charged that, although steel can be made in the Chicago district for less than at Pittsburgh, consumers are compelled to pay what the steel costs in Pittsburgh which, it is declared, is

equivalent to loading \$5.40 needless expense upon every ton used in the West. The various organizations which are fighting Pittsburgh as a basing point have the approval of numerous sheet metal contractors, notably that of the members of the Sheet Metal Contractors' Association of Wisconsin.

VERSES ADVOCATE SHEET METAL.

Advertising men are not limited by the conditions of their profession to any particular medium of expression. Indeed, every device which can be exploited in the work of persuading the people to buy commodities is used by them as a matter of daily routine. Thus, for example, Charles L. Atwood, advertising manager of the Milwaukee Corrugating Company, Milwaukee, Wisconsin, employs verse now and then as a channel for the flow of his ideas. The soaring prices of lumber lend force to his advocacy of metal lath in building. Although he entitles the stanzas "The Only Hope That Europe Hath," they are also applicable to building conditions in this country. The lines are as follows:

The Only Hope That Europe Hath.
The trees in good old France are gone,
The Belgian woods are down;
The walls that buildings stood upon
Are wrecked in every town.

Roumania is desolate;
They have no timber now.
Poor Servia has shard her fate—
They must rebuild, but how?

John Bull must save his great estates,
So the Lords can hunt and fish,
Now, what can there be done, my mates,
To meet this fierce condish?

Your Uncle Sam has logs somewhere,
For matches and airplanes;
New Canada has none to spare—
She needs all that remains.

The only hope that Europe hath
Of reconstruction neat
Is buildings made of metal lath
And stucco and concrete.

And U. S. homes that grace your path,
In town and city street,
Will many be of metal lath
And stucco and concrete.

The foregoing stanzas contain a suggestion worthy of further development. From the vantage point of economy, lasting service and fire protection, there can be no controversy concerning the superiority of sheet metal over lumber as a construction material. The sheet metal trade in general would advance its interests by bringing this fact distinctly before the public in various forms of advertising.

ASKS FOR SUGGESTIONS.

Numerous difficulties which have arisen in the practice of the sheet metal trade have been presented from time to time to our readers, and in the vast majority of cases have been satisfactorily solved. It is, therefore, with full confidence in the obtainment of the successful solution of his problem that we present the following letter:

To AMERICAN ARTISAN AND HARDWARE RECORD:

Herewith I am sending you a drawing with the request that you will be kind enough to ask some of

the craft to inform me how to strike this snout on the body of the pail in one piece.

This is designed to be a round pail with a snout ten and one-half inches in diameter and 12 inches high. I

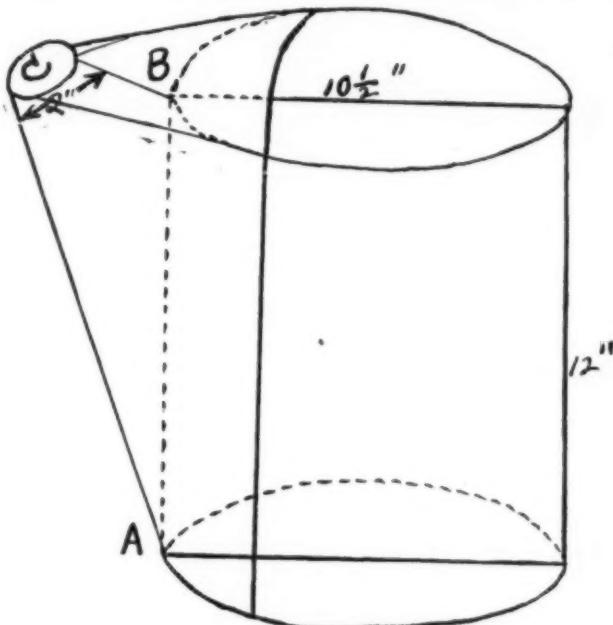


Diagram of Problem.

want to know how to strike the snout A B C to hit the side of the pail.

Yours truly,

THOMAS WHEELER.

Norfolk, Nebraska, September 8, 1919.

MAKES VARIED LINE OF PRODUCTS.

The Sykes Company, 930 West 19th Place, Chicago, Illinois, states that price lists and estimates will be furnished upon the request of dealers. This Company specializes in metal roofing and siding; corrugated painted or galvanized sheet metal window frames and sash, glazed with wired glass; skylights and skylight gearing. The Sykes Company makes a greatly varied line of sheet metal products, one of which is shown in the illustration herewith. It has been in business for many years and is known throughout the trade for making goods of dependable material and uniform excellence. In all emergencies, it has maintained its high standards and built up a reputation for superior workmanship and high grade materials. Dealers will find it to their advantage to communicate with The Sykes Company of 930 West 19th Place, Chicago, Illinois.

LOSE LIVES WHILE INSTALLING SHEET METAL MACHINERY.

A distressing accident resulting in two deaths occurred September 8, 1919, in the plant of the Willis Manufacturing Company, Galesburg, Illinois, makers of sheet metal products. A ten ton machine was being installed in a new power press at the works when, in some unexplained manner, it fell and killed P. O. Munson, a contractor, and Charles Devore, a workman, pinning them to the concrete floor. Another workman, Charles Smith, suffered a broken ankle.

NOTES AND QUERIES.

Bovee's Warm Air Heater.

From James Barrett, Alton, Illinois.

We would like to know who can furnish repairs for Bovee's warm air heater, made by the Bovee Furnace Works of Waterloo, Iowa.

Ans.—You can secure them from the Northwestern Stove Repair Company, 654 West Twelfth Street, Chicago, Illinois.

Nickelplated Auto Hood Hinges.

From Cahill and Sorsoleil, Sioux City, Iowa.

Please inform us who makes nickelplated auto hood hinges.

Ans.—Attwood Brass Works, Detroit, Michigan; The Bossert Corporation, Utica, New York; and Homer D. Bronson Company, Beacon Falls, Connecticut.

Slate and Tile Roofing.

From L. Leuenberger, De Forest, Wisconsin.

Kindly advise who in Chicago handles slate and tile roofing.

Ans.—Slate: Wisconsin Lime and Cement Company, 603 Chamber of Commerce Building, Chicago. Tile: Federal Cement Tile Company, 110 South Dearborn Street; Ludowici-Celadon Company, 104 South Michigan Avenue; and Universal Roofing Tile Company, 3600 Milwaukee Avenue; all Chicago.

Chamberlin Weather Strip.

From the Valley Cornice & Slate Company, Limited, Saginaw, W. S., Michigan.

Can you tell us who manufactures the Chamberlin Weather Strip? Also give us the names of other manufacturers of weather strips.

Ans.—Chamberlin Metal Weather Strip Company, 100 Third Avenue, Detroit, Michigan. Other manufacturers are: American Metal Weather Strip Company, Grand Rapids, Michigan; Chicago Metal Weather Strip Company, 1617 North Troy Street, Chicago; W. J. Dennis and Company, 2120 West Lake Street, Chicago; L. R. Harsha Manufacturing Company, 2010 Carroll Avenue, Chicago; Perfection Metallic Weather Strip Company, Detroit, Michigan; and Robbins Manufacturing Company, 1815 North Central Park Avenue, Chicago.

Address of The J. L. Prescott Company.

From The D. Moore Company, Limited, Hamilton, Ontario, Canada.

Will you please give us the address of The J. L. Prescott Company?

Ans.—They are located at 92 West Broadway, New York City.

Sheet Metal Tools.

From Dahlqvists Platslageri & Mek. Verkstad, Norrkoping, Sweden.

1. We would like to know who manufactures a machine to make 6" elbows and smaller. 2. Also who makes an 8' cornice brake that will bend 16 gage iron. Can you also give us names of concerns from whom we may purchase sheet metal tools?

Ans.—1. The Hemp and Company of St. Louis, Missouri; and the Niagara Machine and Tool Works of Buffalo, New York, make a machine for making small elbows. 2. Dreis and Krump Manufacturing Company, 2915 South Halsted Street, Chicago, make an 8' cornice brake for bending 16 gage iron. 3. You may obtain sheet metal tools from the following:

Bertsch and Company, Cambridge City, Indiana; Berger Brothers Company, 229-231 Arch Street, Philadelphia; Friedley-Voshardt Company, 733 South Halsted Street, Chicago; Lemox Throatless Shear Company, Department AA, Marshalltown, Iowa; Merchant and Evans Company, 347 North Sheldon Street, Chicago; Peck, Stow and Wilcox Company, Cleveland, Ohio; and W. A. Whitney Manufacturing Company, Rockford, Illinois.

Peerless Washing Machine.

From the McQuesten Hardware Store, Muscatine, Iowa.

Kindly advise who makes the Peerless Washing Machine.

Ans.—The Michigan Washing Machine Company of Muskegon, Michigan, makes this washing machine.

Stove Pipe Wire.

From J. A. Battin Stove Supply Company, 1641 Lawrence Street, Denver, Colorado.

Can you advise where we can procure stove pipe wire, put up in fifty foot lengths?

Ans.—Morgan Spring Company, 122 South Michigan Avenue; Wilson Steel Products Company, 49th and Western Avenue; and Wright Wire Company, 31 West Austin Avenue; all of Chicago.

Speed Washing Machine.

From the McQuesten Hardware Store, Muscatine, Iowa.

We would like to know the name and address of the manufacturer of the Speed Washing Machine.

Ans.—This is made by the Grinnell Washing Machine Company of Grinnell, Iowa.

Annealed Wire.

From J. A. Battin Stove Supply Company, 1641 Lawrence Avenue, Denver, Colorado.

Where can we buy 18, 19 and 20 gage annealed wire?

Ans.—American Steel and Wire Company, 208 South LaSalle Street; Morgan Spring Company, 122 South Michigan Avenue; Wilson Steel Products Company, 49th and Western Avenue; Wright Wire Company, 31 West Austin Avenue; all of Chicago, and the Pittsburgh Steel Company, Pittsburgh, Pennsylvania, or 322 South Michigan Avenue, Chicago.

Domestic Electric Washer.

From Wolfe and Becker, Beloit, Wisconsin.

Please tell us where we can obtain wringer rolls and gears for the Domestic Electric Washer.

Ans.—This is made by the Domestic Laundry Equipment Corporation, 1365 Lexington Avenue, New York City, and they undoubtedly can furnish you with the required parts.

Honeycomb Cores.

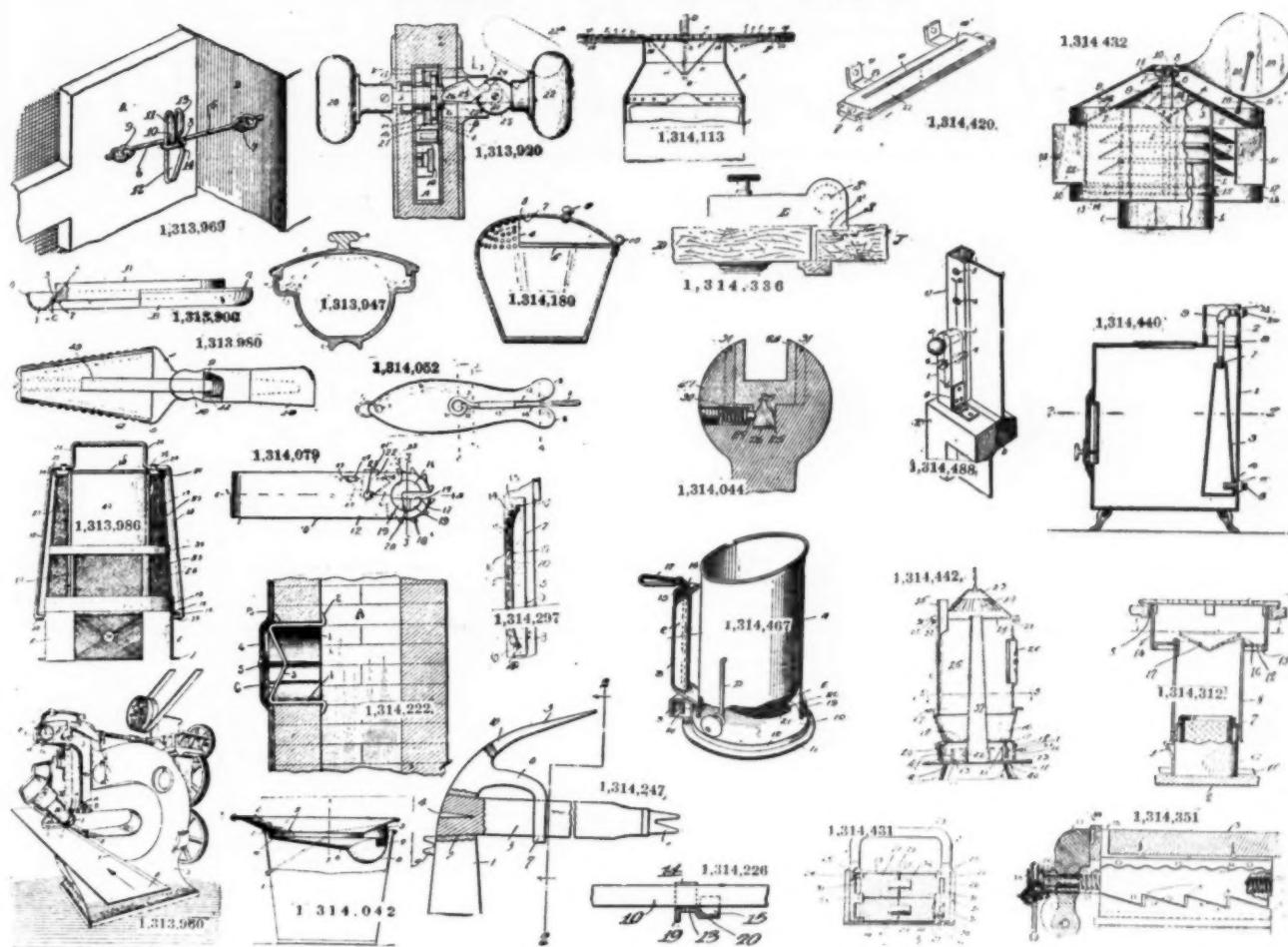
From the Peru Sheet Metal Shop, Peru, Illinois.

We would like to know where we can buy equipment for putting new honeycomb cores or radiating surface in an old auto radiator.

Ans.—The following firms can furnish this: Shotwell-Johnson Company, 385 Main Avenue, St. Paul, Minnesota; Nelson J. Quinn Company, Toledo, Ohio; The Corcoran Manufacturing Company, Cincinnati, Ohio; Eastern Auto Core Company, 1808 Grand Avenue, Kansas City, Missouri; and Ideal Sheet Metal Works, 213 North Morgan Street, Chicago, Illinois.

The South Bend Tin Manufacturing Company, South Bend, Indiana, has been incorporated for \$50,000 by Martin Kaniewski, Ignace Cierpiat and Adolph Gruszczynski.

NEW PATENTS.



1,313,900. Bread-Board. George J. Kling, St. Paul, Minn. Filed Apr. 29, 1918.

1,313,920. Door-Lock. Walter R. Schlage, Berkeley, Calif. Filed Mar. 29, 1917.

1,313,947. Cooking and Serving Device for Fruits. Robert C. Lafferty, New York, N. Y. Filed Mar. 24, 1916.

1,313,960. Shear. Henry Collier Smith, St. Marys, Ohio. Filed Jan. 27, 1919.

1,313,969. Screen-Door Hook. Oscar C. Williamson, Mountain View, Calif. Filed Feb. 14, 1919.

1,313,980. Safety-Razor. Harry Blum, Johnstown, Pa. Filed Jan. 22, 1918.

1,313,986. Insect-Trap. Andrew J. Hardin, Chattahoochee, Fla. Filed Dec. 9, 1916.

1,314,042. Milk-Strainer. Claude L. Brainard, Mount Vernon, S. D. Filed Feb. 1, 1918. Renewed Dec. 18, 1918.

1,314,044. Wrench. Joseph E. Bunker, Chicago, Ill. Filed Dec. 14, 1918.

1,314,052. Artificial Fish-Bait. Frederick William Dubrow, Sausalito, Calif. Filed Jan. 4, 1919.

1,314,079. Wire-Splicing Tool. Harry H. Heuberger, Sheffield, Iowa. Filed Nov. 14, 1917.

1,314,113. Heater. Albert C. Althouse, Dublin, Pa. Filed Apr. 27, 1918.

1,314,180. Kettle. Martha O. Ayres, Rioblanco, Colo. Filed Dec. 20, 1918.

1,314,222. Flue-Stop. Ralph Shurtliff, St. Louis, Mo. Filed Oct. 21, 1914. Renewed Jan. 29, 1919.

1,314,226. Can-Opener. James P. Sweeney, Saugerties, N. Y. Filed June 14, 1917.

1,314,247. Hammer. Bennett J. Clendenen, Miami, W. Va. Filed Feb. 15, 1919.

1,314,297. Washboard. Ervin L. Yuncker, Dodge City, Kans. Filed Jan. 4, 1919.

1,314,312. Oil-Stove. William A. Emmerson, Chattanooga, Okla. Filed Nov. 21, 1917.

1,314,336. Door-Jamb-Lock Staple-Fixture. Charles Kemp, New York, N. Y. Filed Apr. 28, 1919.

1,314,351. Vise. George Moore, Erie, Pa. Filed Feb. 21, 1919.

1,314,420. Device for Oiling Handsaws. Roy Rankin Myers, Chicago, Ill. Filed Nov. 27, 1918.

1,314,431. Combination-Padlock. Saul Shaler, New York, N. Y., assignor of one-half to Abraham Shaler, New York, N. Y. Filed Apr. 8, 1919.

1,314,432. Rotary Ventilator. Lord B. Sharpnack, Detroit, Mich. Filed May 26, 1919.

1,314,440. Stove. Charles B. Smith, Kokomo, Ind. Filed Mar. 29, 1919.

1,314,442. Heating-Stove. Josiah C. Sutton, Mount Pleasant, Mich. Filed Aug. 15, 1918.

1,314,448. Window-Fastener. John W. McMahon, Winthrop, Mass. Filed Dec. 15, 1917.

1,314,467. Flour-Sifter Attachment. Harry P. Dachsel, Mountain View, Ark. Filed Mar. 31, 1917.

ENTER THE AGE OF COOPERATION.

The past has been an age of marvelous mechanical invention, and there is no telling what secrets science may yet reveal to us, but the age to come is fundamentally one when industry must be humanized; machinery second, man first will ever henceforth be the rule. Let us therefore individually try to make our best contribution to this new social order when spiritual values will be first and men will be bound together by the only ties which last—friendship, cooperation and good will.

WEEKLY REPORT OF TRADE AND THE MARKETS

STEEL TRADE IS HOLDING BACK IN WAITING FOR OUTCOME OF THE IMPENDING LABOR CRISIS.

While in no sense pessimistic as to the continuance of prosperity, the steel trade is more or less uncertain concerning the possible effects of industrial unrest among the workers. This is reflected in the curtailing of future operations to a considerable extent. Producers do not care to risk a shutdown in the future with their plants full of business, and with this idea in mind are holding down on business as much as possible. It is reported that specifications against the contracts which were accepted in May, June and July have been running at a good rate, with July the most active month of the three. However, little new business is being considered and uncertainty as to the future is spreading to steel consumers, who do not care to undertake projects which might be halted midway by non-delivery of steel.

While the industry as a whole is operating around 80 to 85 per cent of normal capacity, results are not so great as they would be with better labor, inasmuch as present labor is lax and is not producing the same results as would have been expected from operations at a like rate before the war.

It is expected that the showing for August will equal that of July, which was very good, but shipments during the month just passed would have been on a larger scale were it not for the scarcity of freight cars, and with the coming grain movement, it is not likely that the near future will witness any distinct improvement in the situation as regards rolling stock available for the steel industry.

While labor agitation has had a deterrent influence on the steel industry an excellent export business is being done in the various products and in some grades of pig iron, such as low phosphorous iron for Italy. Inquiry has been very good the past week.

Roughly figured, exchange is at the following discount: Sterling, 14 per cent; francs, 26 per cent; lire, 46 per cent. The comparison is better made, however, by taking reciprocals, showing how much premium the foreign buyer must pay for goods, compared with the cost if exchange were at gold parity. These premiums can be put at: British, 16 per cent; French, 55 per cent; Italian, 87 per cent. When the Italians buy, although having to pay double prices, so to speak, it is evident that they need material badly and quickly.

There are definite advices that a considerable volume of iron and steel business destined for the United States is being held back by British buyers on account of the exchange situation. Apparently that means that the prospective buyers expect an early trend toward parity in dollar exchange in London.

STEEL.

In spite of the heavy demand for the output of their mills, there is disposition among leading steel producers to maintain prices on present levels rather than to advocate an advance as there is considerable tonnage booked for forward delivery at present prices and to advance quotations now would mean a corresponding increase in wage demands and this would mean delivering steel sold at present prices with manufacturing prices increased.

COPPER.

There is no change noted in the quiet situation of copper. The market is a waiting one, and dependent on the development of the export movement, which is held back by the foreign exchange situation. As soon as the peace treaty is ratified by Congress, producers expect a material betterment in the outlook, as then the credit arrangements with Germany can be completed. Trading at present is exceedingly quiet and small demand is satisfied by speculators at offerings from $\frac{1}{2}$ cent to 1 cent below the producers' prices.

It is estimated that the imports of copper last month were about 30,000,000 pounds, being more than 5,000,000 pounds less than average monthly arrivals, which are estimated at 35,200,000 pounds.

The output of crude copper by United States smelters in August is estimated to have been 95,000,000 pounds and with arrivals of 30,000,000 pounds, gives a total of 125,000,000 pounds that were available for refining and this is the amount estimated to have been turned out by the refineries. Deducting 30,000,000 pounds exported, would leave 93,000,000 pounds available for domestic consumption, but home consumers are understood to be using not over 25 per cent more than they used before the war, indicating that their present requirements are about 81,000,000 pounds a month, as their average needs during the five years preceding the war were 61,000,000 pounds a month. Upon this basis, about 12,000,000 pounds of refined copper were added to surplus stocks in August. During the war period, domestic consumers utilized 101,000,000 pounds a month.

TIN.

The market for spot tin remained firm during the past week despite the fluctuations in the future market. As shipments incoming during the month of August were close to 5,000 tons the scarcity of spot offerings demonstrates clearly that the larger tonnage went right into consuming channels, and was not open for distribution. During the present month the situation might change toward a larger supply of tin, as the London Statist is stating the amount of tin afloat to the United States at 7,640 tons.

The London market has not yet recovered its power and influence on American prices. The Singapore market is more influential, but in the final analysis the market here is being made by the sharp competition that exists between the importing firms here, there being now more than double as many in the tin business than before the war. Pig tin is selling in the Chicago market at 60 cents per pound and bar tin at 61 cents per pound.

LEAD.

A distinct improvement is discernible in the demand for lead. Outside lots are rapidly being cleared up. October shipment lead is in good demand at any figure below the prevailing East St. Louis price of the producers.

SOLDER.

No additional changes have occurred in the prices of solder. Quotations in the Chicago market are as follows: Warranted, 50-50, per pound 37.5 cents; Commercial, 45-55, per pound 34.5 cents; Plumbers', per pound, 31.4 cents.

ZINC.

A condition of quietude is noted in the zinc market. The demand from consumers is not steady, occasionally in good volume and again subsiding, and confined to buyers' immediate wants without any interest shown in futures. That the present level is maintained as well as it is, bespeaks an almost equal indifference on the part of sellers. Some producers are meeting current figures for a limited tonnage, but show no evidence of need to force sales, and an aversion to quoting futures.

Production is undoubtedly on a moderate scale, and it is probable that the demand that must shortly ensue for last quarter zinc will find the market fairly well stabilized in consequence. But with the small amount of outside interest that at present exists, it would seem that the present unremunerative level will have to be advanced or ore prices reduced, before buyers will find it possible to effect forward engagements.

SHEETS.

The leading interest has orders in excess of prospective output and a considerable tonnage will have to be carried over into next year. The company is out of the open market as it has been, practically speaking, for some time past.

Among the independent sheet mills operations are full except as there are mills out for repairs or closed on account of labor troubles, and the average operation among independents is about 90 per cent of the full number of mills.

There is a moderate amount of pressure for sheets in the open market, but the tonnage demand is not very large in the aggregate. Buyers contract on only a moderately liberal scale and they are now specifying very heavily. It is estimated that while contracts run to the end of the year fully 60 per cent of the contract tonnage unfilled is specified.

Sheet prices are very firm and occasionally a producer quotes above the regular market.

TIN PLATE.

It was reported last week that 30,000 boxes of export tin plate were offered to American mills by a buyer who asserted that it would take below \$7, Pittsburgh, to meet prices quoted by Welsh mills, and the business is likely to be allowed to go to the Welsh mills in consequence. Japanese business of 10,000 tons of light gauge black sheets, all one size and only two gauges, material that could be rolled on either sheet or tin mills, is offered. Shipment is wanted well before the end of the year and no mill seems to be willing to take the whole tonnages, although it is possible that the business may be placed by splitting it up.

The feature of the tin plate situation is the fact that many consumers find their requirements running at heavier rates than they anticipated and they are accordingly endeavoring to buy additional tonnages. This is not easy as all the mills are more or less filled with business and none could start deliveries within the next few weeks.

In the Chicago market, first quality bright tin plates 1C 14x20 are quoted at \$13.20 per box of 112 sheets and other gages and sizes at corresponding prices.

WARM AIR REGISTERS.

The discount on warm air registers has been reduced from 40 to 30 per cent for japanned, bronzed, plated, and baseboard. Quotations on solid brass or bronze metal registers have been changed from net to list. A reduction of 10 per cent has taken place in the discount on warm air register faces, japanned, bronzed, and plated. The 4x6 to 14x14 sizes being lowered from 40 to 30 per cent, and the 14x14 to 38x42 sizes from 60 to 50 per cent.

OLD METALS.

Wholesale quotations in the Chicago district which may be considered nominal are as follows: Old steel axles, \$26.00 to \$27.00; old iron axles, \$28.50 to \$29.50; steel springs, \$20.50 to \$21.50; No. 1 wrought iron, \$19.00 to \$20.00; No. 1 cast, \$23.50 to \$24.50, all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 15 cents; light brass, 9 cents; lead, 4½ cents; zinc, 5 cents; cast aluminum, 24 cents.

PIG IRON.

The furnaces are still declining to quote on 1920 iron. Consumers have been vainly trying to buy for some time, as usually iron for the first half of the year is bought in September or October, but this year, while buyers are willing, sellers are reluctant, as they do not know what their costs will be so far ahead. But the time is rapidly approaching when next year's deliveries will be the feature of the market. In the meantime iron at furnace yards is gradually disappearing, and the present demand for small tonnages to fill in unexpected orders will dispose of all surplus.

Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS.	LEAD.	Broad.	BEATERS.
	American Pig..... \$6 25 Bar..... 6 75	Plumbs. West, Pat..... List " Can. Pat..... \$69 00 " Firemen's (handled), per doz. 21 00	Carpet. Per doz. No. 7 Tinned Spring Wire... \$1 10 No. 8 Spring Wire coppered... 1 50 No. 9 Preston..... 1 75
PIG IRON.	Sheet. Full coils..... per 100 lbs. \$8 75 Cut coils..... per 100 lbs. 9 00	TIN.	Egg. Per doz. No. 50 Imp. Dover..... \$1 10 No. 102 " " tinned... 1 35 No. 150 " " hotel... 2 10 No. 10 Heavy hotel tinned... 2 10 No. 13 " " .. 3 30 No. 15 " " .. 3 60 No. 18 " " .. 4 50
Basic..... \$25 50 Northern Fdy., No. 2... 26 75 Southern Fdy., No. 2... 30 00 Lake Sup. Charcoal... 31 45 Malleable..... 27 25	Pig tin..... 60c Bar tin..... 61c	Single Bitted (without handles). Prices Warren Silver Steel... on application Warren Blue Finished. " Matchless Red Pole..... \$11 50	Hand. 8 9 10 12 Per doz. \$11 50 13 00 14 75 18 00
FIRST QUALITY BRIGHT TIN PLATES.	HARDWARE.		Moulders'. 12-inch..... Per doz. 20 00
Per box	ADZES.		BELLS.
IC 14x20,.... 112 sheets \$13 20 IX 14x20..... 14 63 IXX 14x20..... 16 30 IXXX 14x20..... 17 50 IXXXX 14x20..... 18 70 IC 20x28..... 26 40 IX 20x28..... 29 25 IXX 20x28..... 32 60 IXXX 20x28..... 35 00 IXXXX 20x28..... 37 40	Carpenters'. Plumbs..... Net	Call. 3-inch Nickeled Rotary Bell, Bronzed base..... per doz. \$5 50	
COKE PLATES.	Coopers'. Barton's..... Net White's..... Net		Cow. Kentucky..... 30%
Cokes, 180 lbs..... 20x28 \$16 00 Cokes, 200 lbs..... 20x28 16 20 Cokes, 214 lbs..... IC 20x28 16 60 Cokes, 270 lbs..... IX 20x28 18 50	Railroad. Plumbs..... Net	Door. New Departure Automatic... \$7 50	
BLUE ANNEALED SHEETS.	AMMUNITION.	BALANCES, SPRING.	Rotary. 3-in. Old Copper Bell... 6 00 3-in. Old Copper Bell, fancy... 8 00 3-in. Nickeled Steel Bell... 6 00 34-in. Nickeled Steel Bell... 6 50
No. 10..... per 100 lbs. \$4 57 No. 12..... per 100 lbs. 4 62 No. 14..... per 100 lbs. 4 67 No. 16..... per 100 lbs. 4 77	Peters Cartridges. Semi-Smokeless..... Less 10-1/2% Smokeless..... Less 10-1/2%	Pelouze..... 20%	
ONE PASS COLD ROLLED BLACK.	Shells, Loaded, Peters. Loaded with Black Powder. Less 15% Loaded with Smokeless Powder, medium grades..... Less 15% Loaded with Smokeless Powder, high grade..... Less 15%	BAGS, PAPER NAIL.	
No. 18-20..... per 100 lbs. \$5 42 No. 22-24..... per 100 lbs. 5 47 No. 26..... per 100 lbs. 5 52 No. 27..... per 100 lbs. 5 57 No. 28..... per 100 lbs. 5 62 No. 29..... per 100 lbs. 5 67	Winchester. Smokeless Repeater Grade... 10&5/8% Smokeless Leader Grade... 10&5/8% Black Powder... 10&5/8%	Pounds..... 10 16 20 25 Per 1,000... \$5 00 6 50 7 50 9 00	
ALVANIZED.	U. M. C. Nitro Club..... 10&5/8% Arrow..... 10&5/8% New Club..... 10&5/8%	BALANCES, SPRING.	
No. 10..... per 100 lbs. \$6 22 No. 18-20..... per 100 lbs. 6 37 No. 22-24..... per 100 lbs. 6 52 No. 26..... per 100 lbs. 6 67 No. 27..... per 100 lbs. 6 82 No. 28..... per 100 lbs. 6 97 No. 30..... per 100 lbs. 7 47	Gun Wads—per 1000. Winchester 7-8 gauge..... \$2 25 " 9-10 gauge..... 1 94 " 11-28 gauge..... 1 63	Pinch or Wedge Point, per cwt.... \$8 50	
WELLSVILLE POLISHED STEEL.	Powder. Each	BARS, CROW.	
No. 18-20..... per 100 lbs. \$7 10 No. 22-24..... per 100 lbs. 7 20 No. 26..... per 100 lbs. 7 30 No. 27..... per 100 lbs. 7 40 No. 28..... per 100 lbs. 7 50	DuPont's Sporting, kegs..... \$11 25 " " 1/2 kegs..... 5 90 DuPont's Canisters, 1-lb..... 56 " " 2-lb..... 32 " " Smokeless, drums..... 43 50 " " kegs..... 22 00 " " 1/2 kegs..... 11 25 " " 1-lb kegs..... 5 75 " " canisters..... 1 00	Pelouze..... 20%	
KEYSTONE HAMMERED POLISHED STEEL.	L. & R. Orange, Extra Sporting kegs..... 11 25 L. & R. Orange, Extra Sporting 1/2-kegs..... 5 90 L. & R. Orange, Extra Sporting 1-lb. canisters..... 3 10 L. & R. Orange, Extra Sporting 1/2-lb. canisters..... 56 L. & R. Orange, Extra Sporting 1/2-lb. canisters..... 32 L. & R. Orange, Extra Sporting 1-lb. canisters..... 56 L. & R. Orange, Extra Sporting 1/2-lb. canisters..... 32 L. & R. Orange, Extra Sporting 1-lb. canisters..... 22	BASKETS.	
28-26..... per 100 lbs. \$9 85 24-22..... per 100 lbs. 9 35	Post Hole.	Clothes. Small Willow..... per doz. 15 00 Medium Willow..... " 17 00 Large Willow..... " 20 00	
BAR SOLDER.	Hercules' E.C. and "Infallible" 50 can drums..... 43 50 Hercules "E. C." kegs..... 22 50 Hercules "E. C." 1/2-kegs..... 11 25 Hercules "Infallible," 25 can drums..... 22 00 Hercules "Infallible," 10 can drums..... 9 00 Hercules "E. C." 1/2-kegs..... 5 75 Hercules "E. C." and "Infallible" canisters..... 1 00 Hercules W. A. .30 Cal. Rifle, canisters..... 1 25 Hercules Lightning Rifle, canisters..... 1 25 Hercules Sharpshooter Rifle, canisters..... 1 25 Hercules Unique Rifle, canisters..... 1 50 Hercules Bullseye Revolver, canisters..... 1 00	AUGERS.	
Warranted, 50-50..... per lb. 37.50 Commercial, 45-55..... " 34.50 Plumbers'..... " 31.40	AWLS.	Boring Machine..... 60% Irwin's..... 25% Carpenter's Nut..... 50%	
ZINC.		Hollow.	
In slabs..... \$1c	Bonney's..... per doz. 30 00 Stearns, No. 0..... " 43 25 " No. 1..... " 43 25 " No. 2..... " 43 25 " No. 3..... " 42 00 " No. 4..... " 10 50 " No. 30..... " 45 00 " No. 33..... " 45 00 " No. 44..... " 17 00 " No. 50..... " 48 00 " No. 55..... " 45 00 " No. 60..... " 42 00		
SHEET ZINC.		Post Hole.	
Cask lots..... 13c Less than cask lots..... 13 1/2 to 13 1/2c	Hercules Post Hole and Well..... 25% Vaughan's, 4 to 9-in... per doz. \$13 00		
COPPER.	ANVILS.	AWLS.	
Copper Sheet, base..... 33 1/2c	Trenton, 70 to 80 lbs..... 9 1/2c per lb. Trenton, 81 to 150 lbs..... 9 1/2c per lb.	Brod. No. 3 Handled..... per doz. \$0 65 No. 1050 Handled..... " 1 40 Shouldered, assorted 1 to 4, per gro. 4 00 Patent ass't'd. 1 to 4... 85	
		Harness.	
		Common..... " 1 05 Patent..... " 1 00	
		Peg. Shouldered..... " 1 60 Patented..... " 75	
		Scratch.	
		No. 10, socket hand'l'd. per doz. 2 50 No. 344 Goodell-Pratt, List, less 35-40% No. 7 Stanley..... " 2 25	
		AXES.	
		Boys' Handled. Niagara..... 12 50	
		Screw Driver.	
		No. 1 Common..... " 1 40 No. 26 Stanley..... " 1 75	